Connecting via Winsock to STN

```
Welcome to STN International! Enter x:x
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LOGINID:ssspta1202txn

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

```
* * * * * * * *
                    Welcome to STN International
                 Web Page URLs for STN Seminar Schedule - N. America
NEWS
    1
                 "Ask CAS" for self-help around the clock
NEWS 2
NEWS 3 SEP 09 CA/CAplus records now contain indexing from 1907 to the
                present
                INPADOC: Legal Status data reloaded
NEWS 4 DEC 08
NEWS 5 SEP 29 DISSABS now available on STN
NEWS 6 OCT 10 PCTFULL: Two new display fields added
NEWS 7 OCT 21 BIOSIS file reloaded and enhanced
NEWS 8 OCT 28 BIOSIS file segment of TOXCENTER reloaded and enhanced
NEWS 9 NOV 24 MSDS-CCOHS file reloaded
NEWS 10 DEC 08 CABA reloaded with left truncation
NEWS 11 DEC 08 IMS file names changed
NEWS 12 DEC 09 Experimental property data collected by CAS now available
                 in REGISTRY
                STN Entry Date available for display in REGISTRY and CA/CAplus
NEWS 13 DEC 09
NEWS 14 DEC 17
                DGENE: Two new display fields added
                BIOTECHNO no longer updated
NEWS 15 DEC 18
                CROPU no longer updated; subscriber discount no longer
NEWS 16 DEC 19
                 available
                Additional INPI reactions and pre-1907 documents added to CAS
NEWS 17 DEC 22
                 databases
        DEC 22
                IFIPAT/IFIUDB/IFICDB reloaded with new data and search fields
NEWS 18
NEWS 19
        DEC 22
                ABI-INFORM now available on STN
                Source of Registration (SR) information in REGISTRY updated
NEWS 20
        JAN 27
                 and searchable
                A new search aid, the Company Name Thesaurus, available in
        JAN 27
NEWS 21
                 CA/CAplus
                German (DE) application and patent publication number format
NEWS 22
        FEB 05
                 changes
                MEDLINE and LMEDLINE reloaded
NEWS 23
        MAR 03
NEWS 24
        MAR 03
                MEDLINE file segment of TOXCENTER reloaded
                FRANCEPAT now available on STN
NEWS 25
        MAR 03
             MARCH 5 CURRENT WINDOWS VERSION IS V7.00A, CURRENT
NEWS EXPRESS
             MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
             AND CURRENT DISCOVER FILE IS DATED 3 MARCH 2004
             STN Operating Hours Plus Help Desk Availability
NEWS HOURS
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             General Internet Information
             Welcome Banner and News Items
NEWS LOGIN
             Direct Dial and Telecommunication Network Access to STN
NEWS PHONE
NEWS WWW
             CAS World Wide Web Site (general information)
```

Enter NEWS followed by the item number or name to see news on that specific topic.

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* * * * * * * * * STN Columbus * *

FILE 'HOME' ENTERED AT 17:03:41 ON 24 MAR 2004

=> file reg

COST IN U.S. DOLLARS

SINCE FILE ENTRY

TOTAL

0.21

SESSION 0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 17:03:50 ON 24 MAR 2004 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2004 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 23 MAR 2004 HIGHEST RN 666817-09-0 DICTIONARY FILE UPDATES: 23 MAR 2004 HIGHEST RN 666817-09-0

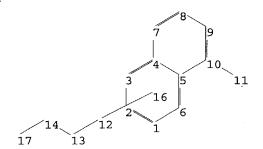
TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

Uploading C:\STNEXP4\QUERIES\09830227.str



chain nodes :

11 12 13

ring nodes :

1 2 3 4 5 6 7 8 9 10

ring/chain nodes :

1.7

chain bonds :

10-11 12-13 13-14

ring/chain bonds :

14-17

ring bonds :

1-6 2-3 3-4 4-5 4-7 5-6 5-10 7-8 8-9 9-10

exact/norm bonds :

 $10 - 11 \quad 12 - 13 \quad 13 - 14 \quad 14 - 17$

normalized bonds :

1-2 1-6 2-3 3-4 4-5 4-7 5-6 5-10 7-8 8-9 9-10

isolated ring systems :

containing 1 :

G1:C,N

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:CLASS

12:CLASS 13:CLASS 14:CLASS 16:CLASS 17:CLASS

Generic attributes :

13:

Number of Carbon Atoms : less than 7

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR

Structure attributes must be viewed using STN Express query preparation.

=>
Uploading C:\STNEXP4\QUERIES\09830227b.str

chain nodes : 11 12 13

```
09/ 830,227
```

ring nodes :

1 2 3 4 5 6 7 8 9 10

ring/chain nodes :

14 17

chain bonds :

10-11 12-13 13-14 ring/chain bonds:

14-17

ring bonds :

 $1-2^{-}$ 1-6 2-3 3-4 4-5 4-7 5-6 5-10 7-8 8-9 9-10

exact/norm bonds :

10-11 12-13 13-14 14-17

normalized bonds :

1-2 1-6 2-3 3-4 4-5 4-7 5-6 5-10 7-8 8-9 9-10

isolated ring systems :

containing 1:

G1:C,N

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:CLASS

12:CLASS 13:CLASS 14:CLASS 16:CLASS 17:CLASS

Generic attributes :

13:

Number of Carbon Atoms : less than 7

L2 STRUCTURE UPLOADED

=> d 12

L2 HAS NO ANSWERS

L2 STR

Structure attributes must be viewed using STN Express query preparation.

=> s l1 ful

FULL SEARCH INITIATED 17:04:34 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 43382 TO ITERATE

100.0% PROCESSED 43382 ITERATIONS SEARCH TIME: 00.00.02

т.3

81 SEA SSS FUL L1

=> s 12 ful

FULL SEARCH INITIATED 17:04:42 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 6798 TO ITERATE

100.0% PROCESSED 6798 ITERATIONS

0 ANSWERS

81 ANSWERS

SEARCH TIME: 00.00.01

L4

0 SEA SSS FUL L2

=> file caplus

COST IN U.S. DOLLARS

FULL ESTIMATED COST

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FILE COVERS 1907 - 24 Mar 2004 VOL 140 ISS 13 FILE LAST UPDATED: 23 Mar 2004 (20040323/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13

L5 25 L3

=> d 15 1- ibib abs hitstr

YOU HAVE REQUESTED DATA FROM 25 ANSWERS - CONTINUE? Y/(N):y

L5 ANSWER 1 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2003:521325 CAPLUS

DOCUMENT NUMBER:

139:239662

TITLE:

High throughput screening identifies novel inhibitors

of Escherichia coli dihydrofolate reductase that are

competitive with dihydrofolate

AUTHOR(S):

Zolli-Juran, Michela; Cechetto, Jonathan D.; Hartlen,

Rebecca; Daigle, Denis M.; Brown, Eric D.

CORPORATE SOURCE:

Department of Biochemistry, McMaster HTS Lab, McMaster

University, Hamilton, ON, L8N 3Z5, Can.

SOURCE:

Bioorganic & Medicinal Chemistry Letters (2003),

13(15), 2493-2496

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER:

Elsevier Science B.V.

DOCUMENT TYPE:

Journal

LANGUAGE:

English

This communication describes the high-throughput screen of a diverse library of 50,000 small mols. against Escherichia coli dihydrofolate reductase to detect inhibitors. Sixty-two compds. were identified as having significant inhibitory activity against the enzyme. Secondary screening of these revealed twelve mols. that were competitive with dihydrofolate, nine of which have not been previously characterized as inhibitors of dihydrofolate reductase. These novel mols. ranged in potency (Ki) from 26 nM to 11 μM and may represent fresh starting points for new small mol. therapeutics directed against dihydrofolate reductase.

IT 215925-78-3

RL: PAC (Pharmacological activity); BIOL (Biological study) (high throughput screening identifies novel inhibitors of Escherichia coli dihydrofolate reductase that are competitive with dihydrofolate)

RN 215925-78-3 CAPLUS

CN 2,4-Quinazolinediamine, 5-[[4-(trifluoromethyl)phenyl]methoxy]- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2002:31424 CAPLUS

DOCUMENT NUMBER:

136:102393

TITLE:

Preparation of quinazolinylureas for treatment of

solid tumors.

PATENT ASSIGNEE(S):

Astrazeneca Ab, Swed.; Astrazeneca Uk Ltd.

SOURCE:

PCT Int. Appl., 149 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT	KIND		DATE			APPLICATION NO. DATE										
							-									
WO 2002002534			A1 20020110					W	20	01-G	4	20010628				
W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	ВG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,
	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	ΡL,	PT,
	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	ΤZ,	UA,	UG,	US,
	UΖ,	VN,	YU,	ZA,	ZW,	AM,	ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM		
RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ ,	UG,	ZW,	AT,	BE,	CH,	CY,

DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG AU 2002-16758 20010628 AU 2002016758 20020114 A5 EP 2000-401897 20000703 PRIORITY APPLN. INFO .: Α WO 2001-GB2874 W 20010628 MARPAT 136:102393 OTHER SOURCE(S): Use of Q1R2NC(:Z)NR3Q2 [Q1 = (substituted) (fused) quinazolinyl, AB quinolinyl, etc.; Q2 = (substituted) aryl, aralkyl, arylcycloalkyl, heteroaryl, heteroarylalkyl; R2, R3 = H, alkyl; R2R3 = CH2, CH2CH2, (CH2)3] as antiinvasive agents in the containment and/or treatment of solid tumor disease is claimed. Thus, 2,6-dichlorophenyl isocyanate was added to a solution of 4-amino-6-methoxy-7-(N-methylpiperidin-4ylmethoxy)quinazoline (preparation given) in CH2Cl2/DMF followed by stirring to qive 1-(2,6-dichlorophenyl)-3-[6-methoxy-7-(N-methylpiperidin-4ylmethoxy)quinazolin-4-yl]urea. Title compds. inhibited proliferation of NIH 3T3 fibroblasts with IC50 in the range, for example, of 0.001-10 μM. 320365-82-0P 320365-83-1P 320365-84-2P IT 320365-85-3P 320365-86-4P 320365-88-6P 320365-89-7P 320365-91-1P 320365-92-2P 320365-93-3P 320365-94-4P 320365-95-5P 320365-96-6P 320365-97-7P 320365-98-8P 320366-04-9P 320366-06-1P 320366-08-3P 320366-10-7P 320366-14-1P 320366-18-5P 320366-20-9P 320366-22-1P 320366-24-3P 320366-26-5P 320366-28-7P 320366-30-1P 320366-31-2P 320366-46-9P 320366-64-1P 320366-66-3P 320366-70-9P 320366-71-0P 320367-02-0P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of quinazolinylureas for treatment of solid tumors) RN320365-82-0 CAPLUS 4-Quinazolinamine, 6-methoxy-7-[(1-methyl-4-piperidinyl)methoxy]- (9CI) CN (CA INDEX NAME) CH₂ MeO Me

320365-83-1 CAPLUS RNCN4-Quinazolinamine, 6-methoxy-7-[3-(1-piperidinyl)propoxy]- (9CI) INDEX NAME)

RN 320365-84-2 CAPLUS 4-Quinazolinamine, 7-[3-(4-morpholinyl)propoxy]- (9CI) (CA INDEX NAME) CN

RN 320365-85-3 CAPLUS

CN 4-Quinazolinamine, 7-[3-(1,1-dioxido-4-thiomorpholinyl)propoxy]- (9CI) (CA INDEX NAME)

RN 320365-86-4 CAPLUS

CN 4-Quinazolinamine, 7-[[4-(4-morpholinyl)-2-butynyl]oxy]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 320365-88-6 CAPLUS

CN 4-Quinazolinamine, 7-[[(2E)-4-(4-morpholinyl)-2-butenyl]oxy]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 320365-89-7 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-[2-(1-piperidinyl)ethoxy]- (9CI) (CA INDEX NAME)

RN 320365-91-1 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-[3-(4-morpholinyl)propoxy]- (9CI) (CA INDEX NAME)

RN 320365-92-2 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-[3-(4-methyl-1-piperazinyl)propoxy]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} N & (CH_2)_3 - O \\ \hline N & MeO \end{array}$$

RN 320365-93-3 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-[3-(1-pyrrolidinyl)propoxy]- (9CI) (CA INDEX NAME)

RN 320365-94-4 CAPLUS

CN 4-Quinazolinamine, 7-[3-(1,1-dioxido-4-thiomorpholinyl)propoxy]-6-methoxy-(9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
N & (CH_2)_3 - O \\
N & MeO
\end{array}$$

RN 320365-95-5 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-[2-[(2-methoxyethyl)methylamino]ethoxy]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \mid \\ \text{MeO-} \text{CH}_2 - \text{CH}_2 - \text{N-} \text{CH}_2 - \text{CH}_2 - \text{O} \\ & \text{MeO} \end{array}$$

RN 320365-96-6 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-[3-(methylsulfonyl)propoxy]- (9CI) (CA INDEX NAME)

RN 320365-97-7 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-[3-(1H-1,2,3-triazol-1-yl)propoxy]- (9CI) (CA INDEX NAME)

RN 320365-98-8 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-[2-(4-pyridinyl)ethoxy]- (9CI) (CA INDEX NAME)

RN 320366-04-9 CAPLUS

CN 4-Quinazolinamine, 7-[2-(dimethylamino)ethoxy]-6-methoxy- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me}_2\text{N}-\text{CH}_2-\text{CH}_2-\text{O} \\ \text{MeO} \end{array}$$

RN 320366-06-1 CAPLUS

CN 2-Imidazolidinone, 1-[2-[(4-amino-6-methoxy-7-quinazolinyl)oxy]ethyl](9CI) (CA INDEX NAME)

$$\begin{array}{c} O \\ HN \\ N \\ -CH_2 \\ -CH_2 \\ -O \\ -N \\ N \\ N \\ NH_2 \\ \end{array}$$

RN 320366-08-3 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-[2-(1-pyrrolidinyl)ethoxy]- (9CI) (CA INDEX NAME)

$$N - CH_2 - CH_2 - O$$
 MeO
 N
 N
 N
 N
 N
 N

RN 320366-10-7 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-[2-(4-morpholinyl)ethoxy]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} N & CH_2 - CH_2 - O \\ \hline \\ N & MeO \end{array}$$

RN 320366-14-1 CAPLUS

CN 4-Quinazolinamine, 7-[2-(1-pyrrolidinyl)ethoxy]- (9CI) (CA INDEX NAME)

CN 4-Quinazolinamine, 7-[2-(1-piperidinyl)ethoxy]- (9CI) (CA INDEX NAME)

RN 320366-20-9 CAPLUS

CN 4-Quinazolinamine, 7-[2-(4-methyl-1-piperazinyl)ethoxy]- (9CI) (CA INDEX NAME)

RN 320366-22-1 CAPLUS

CN 4-Quinazolinamine, 7-[(1-methyl-3-piperidinyl)methoxy]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & N & & \\ & & CH_2-O & \\ & & & NH_2 \\ \end{array}$$

RN 320366-24-3 CAPLUS

CN 4-Quinazolinamine, 7-[3-(1-pyrrolidinyl)propoxy]- (9CI) (CA INDEX NAME)

RN 320366-26-5 CAPLUS

CN 4-Quinazolinamine, 7-[3-(4-methyl-1-piperazinyl)propoxy]- (9CI) (CA INDEX NAME)

Me
$$N$$
— $(CH_2)_3$ — N — N
 N
 N
 N

RN 320366-28-7 CAPLUS

CN 4-Quinazolinamine, 7-[3-(1H-1,2,3-triazol-1-yl)propoxy]- (9CI) (CA INDEX NAME)

RN 320366-30-1 CAPLUS

CN 4-Quinazolinamine, 7-[[(2E)-4-(1-pyrrolidinyl)-2-butenyl]oxy]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 320366-31-2 CAPLUS

CN 4-Piperidinecarboxamide, 1-[3-[(4-amino-6-methoxy-7-quinazolinyl)oxy]propyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & N & & \\ & & \\ H_2N-C & & \\ & & \\ O & & \\$$

RN 320366-46-9 CAPLUS

CN 4-Quinazolinamine, 7-(cyclopropylmethoxy)-6-methoxy- (9CI) (CA INDEX NAME)

RN 320366-64-1 CAPLUS

CN Carbamic acid, [[1-[3-[(4-amino-6-methoxy-7-quinazolinyl)oxy]propyl]-4-piperidinyl]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

t-BuO-C-NH-CH₂
$$N$$
— (CH₂)₃-O N — MeO N

RN 320366-66-3 CAPLUS

CN 4-Quinazolinamine, 7-methoxy-6-[3-(4-morpholinyl)propoxy]- (9CI) (CA INDEX NAME)

RN 320366-70-9 CAPLUS

CN 4-Quinazolinamine, 7-methoxy-6-[3-(1-piperidinyl)propoxy]- (9CI) (CA INDEX NAME)

$$N$$
— (CH₂) 3-0 N
 N
 N
 N

RN 320366-71-0 CAPLUS

CN 4-Quinazolinamine, 7-methoxy-6-[2-(1-pyrrolidinyl)ethoxy]- (9CI) (CA INDEX NAME)

RN 320367-02-0 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-(phenylmethoxy)- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 3 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2002:10463 CAPLUS

DOCUMENT NUMBER:

136:85816

TITLE:

Synthesis of guanidine derivatives of quinazoline and

quinoline for use in the treatment of autoimmune

diseases

INVENTOR(S):

PATENT ASSIGNEE(S):

Poyser, Jeffrey Philip Astrazeneca AB, Swed.; Astrazeneca UK Limited

SOURCE:

 $_{
m GI}$

PCT Int. Appl., 150 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT	NO.	KIND	DATE		AP	PLICAT	DATE						
				-									
WO 2002	000644	A1	2002010	3	WO	2001-	GB269	8 20010619					
W :	AE, AG,	AL, AM,	AT, AU	, AZ,	BA,	BB, BG	, BR,	BY,	BZ,	CA,	CH,	CN,	
	CO, CR,	CU, CZ,	DE, DK	, DM,	DZ,	EC, EE	, ES,	FI,	GB,	GD,	GE,	GH,	
	GM, HR,	HU, ID,	IL, IN	, IS,	JP,	KE, KG	KP,	KR,	KZ,	LC,	LK,	LR,	
	LS, LT,	LU, LV,	MA, MD	, MG,	MK,	MN, MW	, MX,	MZ,	NO,	NZ,	PL,	PT,	
	RO, RU,	SD, SE,	SG, SI	, sk,	SL, '	TJ, TM	I, TR,	TT,	TZ,	UA,	UG,	US,	
	UZ, VN,	YU, ZA,	ZW, AM	, AZ,	BY,	KG, KZ	, MD,	RU,	TJ,	TM			
RW:	GH, GM,	KE, LS,	MW, MZ	, SD,	SL,	SZ, TZ	, UG,	ZW,	ΑT,	ΒE,	CH,	CY,	
	DE, DK,	ES, FI,	FR, GB	GR,	IE,	IT, LU	, MC,	NL,	PT,	SE,	TR,	BF,	
	BJ, CF,	CG, CI,	CM, GA	GN,	GW, 1	ML, MR	NE,	SN,	TD,	TG			
EP 1296	973	A1	20030402	2	EP	2001-	94075	7 20010619					
R:	AT, BE,	CH, DE,	DK, ES	FR,	GB,	GR, II	, LI,	LU,	NL,	SE,	MC,	PT,	
	IE, SI,	LT, LV,	FI, RO	MK,	CY,	AL, TR	_						
PRIORITY APP	LN. INFO	.:			GB 20	00-153	76	Α	20000624				
					GB 20	00-309	89	Α	2000	1219			
					WO 20	01-GB2	698	W	2001	0619			
OTHER SOURCE	(S):	MAR	MARPAT 136:85816										

II

Title compds. I [Q1 = (un) substituted quinazolinyl and quinazolinyl-like AB ring; R2 = H, alkyl; R3 = H, alkyl, or R2 and R3 together form a CH2, (CH2)2 or (CH2)3 group; R5 = H, alkyl, or R5 and R6 together with the N atom to which they are attached form a 4- to 7-membered heterocyclic ring optionally containing a further heteroatom selected from 0, N and S, provided that one of the pairs of groups R2 and R4 together, R3 and R4 together and R5 and R4 together forms a bond; Q2 = aryl, arylalkyl, arylcycloalkyl, heteroaryl, heteroarylalkyl or heteroarylcycloalkyl; R6 = (un)substituted group selected from alkenyl, alkynyl, cycloalkyl and cycloalkenyl, or R6 is a substituted alkyl group, and wherein adjacent carbon atoms in any alkylene chain within a R6 group are optionally separated by the insertion into the chain of a group selected from 0, S, SO, SO2, amino, CO, etc.; or a tautomer thereof] were prepared Over 100 synthetic examples were provided. E.g., Et 3-methoxy-4-((N-methylpiperidin-4-yl)methoxy)benzoate (preparation given) was nitrated (CH2Cl2, TFA, HNO3, 0°C), the nitro group reduced (MeOH, Pt/C, 1.8 atm H2), the product condensed/cyclized (2-methoxyethanol, 115°C, 2 h) and treated with thionyl chloride to give 4-chloro-6-methoxy-7-((N-methylpiperidin-4-yl)methoxy)quinazoline. This intermediate was treated with 4-bromo-2-fluorophenol (DMF, K2CO3, 100°C, 2.5 h), ammonia in isopropanol (2M, 130°C, 16 h) to give the 4-aminoquinazoline derivative which was reacted with 2-chloro-6-methylphenylisothiocyanate (DMF, NaH) to afford 1-(2-chloro-6-methylphenyl)-3-[6-methoxy-7-((N-methylpiperidin-4yl)methoxy)quinazolin-4-yl]thiourea. The thiourea was treated with 2-aminoethanol (CHCl3/MeOH, HgO, 2 h) to give example compound II. I are used in the prevention or treatment of T cell mediated diseases. IT 320365-82-0P, 4-Amino-6-methoxy-7-(N-methylpiperidin-4ylmethoxy)quinazoline 320365-91-1P, 4-Amino-6-methoxy-7-(3morpholinopropoxy) quinazoline 320365-93-3P, 4-Amino-6-methoxy-7-(3-(pyrrolidin-1-yl)propoxy)quinazoline 320366-08-3P, 4-Amino-6-methoxy-7-(2-(pyrrolidin-1-yl)ethoxy)quinazoline 320366-10-7P, 4-Amino-6-methoxy-7-(2-morpholinoethoxy)quinazoline 320366-46-9P, 4-Amino-7-cyclopropylmethoxy-6-methoxyquinazoline 320367-02-0P, 4-Amino-7-benzyloxy-6-methoxyquinazoline 385814-23-3P, 4-Amino-6-methoxy-7-(2-pyridylmethoxy)quinazoline 385814-28-8P, 4-Amino-7-(N-tert-butoxycarbonylpiperidin-4ylmethoxy) -6-methoxyquinazoline 385814-97-1P, 4-Amino-7-(2-morpholinoethoxy)quinazoline RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (intermediate; synthesis of guanidine derivs. of quinazoline and quinoline for use in treatment of autoimmune diseases) RN 320365-82-0 CAPLUS 4-Quinazolinamine, 6-methoxy-7-[(1-methyl-4-piperidinyl)methoxy]- (9CI) CN (CA INDEX NAME)

$$_{\rm Me}$$
 $_{\rm NH_2}$ $_{\rm NH_2}$

RN 320365-91-1 CAPLUS
CN 4-Quinazolinamine, 6-methoxy-7-[3-(4-morpholinyl)propoxy]- (9CI) (CA
INDEX NAME)

RN 320365-93-3 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-[3-(1-pyrrolidinyl)propoxy]- (9CI) (CA INDEX NAME)

$$N$$
— (CH₂)₃-O
 N
 N
 N
 N
 N
 N
 N

RN 320366-08-3 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-[2-(1-pyrrolidinyl)ethoxy]- (9CI) (CA INDEX NAME)

RN 320366-10-7 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-[2-(4-morpholinyl)ethoxy]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} N & CH_2 - CH_2 - O \\ \hline N & MeO \end{array}$$

RN 320366-46-9 CAPLUS

CN 4-Quinazolinamine, 7-(cyclopropylmethoxy)-6-methoxy- (9CI) (CA INDEX NAME)

RN 320367-02-0 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-(phenylmethoxy)- (9CI) (CA INDEX NAME)

RN 385814-23-3 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-(2-pyridinylmethoxy)- (9CI) (CA INDEX NAME)

RN 385814-28-8 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[(4-amino-6-methoxy-7-quinazolinyl)oxy]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ \text{t-BuO-C} & & & \\ & & & \\ \text{O} & & & \\ & & & \\ \end{array}$$

RN 385814-97-1 CAPLUS

CN 4-Quinazolinamine, 7-[2-(4-morpholinyl)ethoxy]- (9CI) (CA INDEX NAME)

IT 320366-66-3, 4-Amino-7-methoxy-6-(3-morpholinopropoxy)quinazoline 385814-42-6, 4-Amino-6-methoxy-7-((N-methylpiperidin-3-

yl)methoxy)quinazoline

RL: RCT (Reactant); RACT (Reactant or reagent)

(reactant; synthesis of guanidine derivs. of quinazoline and quinoline for use in treatment of autoimmune diseases)

RN 320366-66-3 CAPLUS

CN 4-Quinazolinamine, 7-methoxy-6-[3-(4-morpholinyl)propoxy]- (9CI) (CA INDEX NAME)

$$N$$
— $(CH2)3-O$
 N
 N
 N
 N
 N
 N
 N
 N

385814-42-6 CAPLUS RN

4-Quinazolinamine, 6-methoxy-7-[(1-methyl-3-piperidinyl)methoxy]- (9CI) CN(CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ \text{Me} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$$

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 4 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2001:676589 CAPLUS

DOCUMENT NUMBER:

135:227013

TITLE:

Preparation of quinazolinylureas and analogs as VEGF

receptor antagonists

INVENTOR(S):

Hennequin, Laurent Francois Andre; Crawley, Graham Charles; McKerrecher, Darren; Ple, Patrick; Poyser,

Jeffrey Philip; Lambert, Christine Marie Paul Astrazeneca AB, Swed.; Astrazeneca UK Limited

PATENT ASSIGNEE(S):

SOURCE:

PCT Int. Appl., 170 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	PATENT NO.				ND	DATE			A.	PPLI	DATE	DATE						
WO	2001066099			A2 2		20010913			W	20	01-G		20010301					
WO	2001066099																	
	W: AE, AG,			AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
		•	•	•				•	•	•		•		GE,	-	-		
				•	•				•		•	•		LK,	•		-	
		LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	RO,	RU,	
		SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,	
		YU,	ZA,	ZW,	ΑM,	AZ,	BY,	KG,	KZ,	MD,	RU,	ТJ,	TM					
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,	
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,	
		ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG			
EP	EP 1272185				2	2003	0108		EP 2001-907938 20010301									
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR							
JP	JP 2003525897 T						0902		J!	P 20	01-56	64752	2	20010301				
US	US 2003225111 A1 2003120						1204	US 2002-220140 20020828										
PRIORITY	PRIORITY APPLN. INFO.:							EP 2000-400595 A 20000306										
									WO 2001-GB863 W 20010301									

MARPAT 135:227013 OTHER SOURCE(S):

GΙ

AΒ Q1NR2C(:X)NR3Q2 [I; Q1 = e.g., (un)substituted 4-quinazolinyl; Q2 = (un)substituted (hetero)aryl(alkyl), cycloalkyl, etc.; R2,R3 = H or alkyl; R2R3 = (CH2)1-3; X = O, S, NCN, (alkyl)imino] were prepared Thus, Et piperidine-4-carboxylate was converted in 7 steps to Et 2-amino-5-methoxy-4-(1-methylpiperidine-4-ylmethoxy)benzoate which was cyclocondensed with HC(:NH)NH2.HOAc and the product converted in 4 steps to title compound II. Data for biol. activity of I were given. IT 320365-82-0P 320365-83-1P, 4-Amino-6-methoxy-7-(3piperidinopropoxy) quinazoline 320365-84-2P 320365-85-3P , 4-Amino-7-[3-(1,1-dioxotetrahydro-4H-1,4-thiazin-4yl)propoxy]quinazoline 320365-86-4P 320365-88-6P 320365-89-7P 320365-91-1P 320365-92-2P 320365-93-3P 320365-94-4P 320365-95-5P 320365-96-6P 320365-97-7P 320365-98-8P 320366-04-9P 320366-06-1P 320366-08-3P 320366-10-7P 320366-14-1P 320366-18-5P 320366-20-9P 320366-22-1P 320366-24-3P 320366-26-5P 320366-28-7P 320366-30-1P 320366-31-2P 320366-46-9P 320366-64-1P 320366-66-3P 320366-70-9P 320366-71-0P 320367-02-0P, 4-Amino-7-Benzyloxy-6-methoxyquinazoline RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of quinazolinylureas and analogs as VEGF receptor antagonists) RN320365-82-0 CAPLUS CN4-Quinazolinamine, 6-methoxy-7-[(1-methyl-4-piperidinyl)methoxy]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ \text{Me} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$$

RN 320365-83-1 CAPLUS
CN 4-Quinazolinamine, 6-methoxy-7-[3-(1-piperidinyl)propoxy]- (9CI) (CA
INDEX NAME)

RN 320365-84-2 CAPLUS

CN 4-Quinazolinamine, 7-[3-(4-morpholinyl)propoxy]- (9CI) (CA INDEX NAME)

RN 320365-85-3 CAPLUS

CN 4-Quinazolinamine, 7-[3-(1,1-dioxido-4-thiomorpholinyl)propoxy]- (9CI) (CA INDEX NAME)

RN 320365-86-4 CAPLUS

CN 4-Quinazolinamine, 7-[[4-(4-morpholinyl)-2-butynyl]oxy]- (9CI) (CA INDEX NAME)

RN 320365-88-6 CAPLUS

CN 4-Quinazolinamine, 7-[[(2E)-4-(4-morpholinyl)-2-butenyl]oxy]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

CN 4-Quinazolinamine, 6-methoxy-7-[2-(1-piperidinyl)ethoxy]- (9CI) (CA INDEX NAME)

RN 320365-91-1 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-[3-(4-morpholinyl)propoxy]- (9CI) (CA INDEX NAME)

RN 320365-92-2 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-[3-(4-methyl-1-piperazinyl)propoxy]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} N & (CH_2)_3 - O \\ \hline N & MeO \end{array}$$

RN 320365-93-3 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-[3-(1-pyrrolidinyl)propoxy]- (9CI) (CA INDEX NAME)

RN 320365-94-4 CAPLUS

CN 4-Quinazolinamine, 7-[3-(1,1-dioxido-4-thiomorpholinyl)propoxy]-6-methoxy-(9CI) (CA INDEX NAME)

RN 320365-95-5 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-[2-[(2-methoxyethyl)methylamino]ethoxy]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ | \\ \text{MeO-} \text{CH}_2\text{-} \text{CH}_2\text{-} \text{N-} \text{CH}_2\text{-} \text{CH}_2\text{-} \text{O} \\ | \\ \text{MeO} \\ | \\ \text{NH}_2 \\ \end{array}$$

RN 320365-96-6 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-[3-(methylsulfonyl)propoxy]- (9CI) (CA INDEX NAME)

RN 320365-97-7 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-[3-(1H-1,2,3-triazol-1-yl)propoxy]- (9CI) (CA INDEX NAME)

RN 320365-98-8 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-[2-(4-pyridinyl)ethoxy]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} CH_2-CH_2-O & N\\ N\\ MeO & NH_2 \end{array}$$

RN 320366-04-9 CAPLUS

CN 4-Quinazolinamine, 7-[2-(dimethylamino)ethoxy]-6-methoxy- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me}_2\text{N}-\text{CH}_2-\text{CH}_2-\text{O} \\ \text{MeO} \end{array}$$

RN 320366-06-1 CAPLUS

CN 2-Imidazolidinone, 1-[2-[(4-amino-6-methoxy-7-quinazolinyl)oxy]ethyl](9CI) (CA INDEX NAME)

RN 320366-08-3 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-[2-(1-pyrrolidinyl)ethoxy]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{N---} \text{CH}_2\text{---} \text{CH}_2\text{---} \text{O} \\ \text{MeO} \end{array}$$

RN 320366-10-7 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-[2-(4-morpholinyl)ethoxy]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} N - CH_2 - CH_2 - O \\ \hline \\ MeO \end{array}$$

RN 320366-14-1 CAPLUS

CN 4-Quinazolinamine, 7-[2-(1-pyrrolidinyl)ethoxy]- (9CI) (CA INDEX NAME)

RN 320366-18-5 CAPLUS

CN 4-Quinazolinamine, 7-[2-(1-piperidinyl)ethoxy]- (9CI) (CA INDEX NAME)

RN 320366-20-9 CAPLUS

CN 4-Quinazolinamine, 7-[2-(4-methyl-1-piperazinyl)ethoxy]- (9CI) (CA INDEX NAME)

RN 320366-22-1 CAPLUS

CN 4-Quinazolinamine, 7-[(1-methyl-3-piperidinyl)methoxy]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ \text{Me} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$$

RN 320366-24-3 CAPLUS

CN 4-Quinazolinamine, 7-[3-(1-pyrrolidinyl)propoxy]- (9CI) (CA INDEX NAME)

$$N-(CH_2)_3-O$$
 N
 N
 N
 N
 N
 N

RN 320366-26-5 CAPLUS

CN 4-Quinazolinamine, 7-[3-(4-methyl-1-piperazinyl)propoxy]- (9CI) (CA INDEX NAME)

Me
$$N \longrightarrow (CH_2)_3 - O \longrightarrow N$$
 $N \longrightarrow N$
 $N \longrightarrow N$
 $N \longrightarrow N$

RN 320366-28-7 CAPLUS

CN 4-Quinazolinamine, 7-[3-(1H-1,2,3-triazol-1-yl)propoxy]- (9CI) (CA INDEX NAME)

RN 320366-30-1 CAPLUS

CN 4-Quinazolinamine, 7-[[(2E)-4-(1-pyrrolidinyl)-2-butenyl]oxy]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 320366-31-2 CAPLUS

CN 4-Piperidinecarboxamide, 1-[3-[(4-amino-6-methoxy-7-quinazolinyl)oxy]propyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} N & (CH_2)_3 - O \\ H_2N - C \\ \parallel \\ O \end{array} \qquad \begin{array}{c} N \\ MeO \end{array} \qquad \begin{array}{c} N \\ N \\ NH_2 \end{array}$$

RN 320366-46-9 CAPLUS

CN 4-Quinazolinamine, 7-(cyclopropylmethoxy)-6-methoxy- (9CI) (CA INDEX NAME)

RN 320366-64-1 CAPLUS

CN Carbamic acid, [[1-[3-[(4-amino-6-methoxy-7-quinazolinyl)oxy]propyl]-4-piperidinyl]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 320366-66-3 CAPLUS

CN 4-Quinazolinamine, 7-methoxy-6-[3-(4-morpholinyl)propoxy]- (9CI) (CA INDEX NAME)

RN 320366-70-9 CAPLUS

CN 4-Quinazolinamine, 7-methoxy-6-[3-(1-piperidiny1)propoxy]- (9CI) (CA INDEX NAME)

$$N \longrightarrow (CH_2)_3 - O \longrightarrow N$$
 $N \longrightarrow N$
 $N \longrightarrow N$
 $N \longrightarrow N$

RN 320366-71-0 CAPLUS

CN 4-Quinazolinamine, 7-methoxy-6-[2-(1-pyrrolidinyl)ethoxy]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{N} \\ \text{CH}_2 \\ \text{CH}_2 \\ \text{O} \\ \text{NH}_2 \end{array}$$

RN 320367-02-0 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-(phenylmethoxy)- (9CI) (CA INDEX NAME)

L5 ANSWER 5 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN ACCESSION NUMBER: 2001:657149 CAPLUS

DOCUMENT NUMBER:

135:314860

TITLE:

Identification of novel potent inhibitors for

ATP-phosphoribosyl transferase using three-dimensional

structural database search technique

AUTHOR (S):

Gohda, Keigo; Ohta, Daisaku; Kozaki, Akiko; Fujimori,

Ko; Mori, Ichiro; Kikuchi, Takeshi

CORPORATE SOURCE:

International Research Laboratories, CIBA-GEIGY Japan

Ltd., Takarazuka, 665, Japan

SOURCE:

Quantitative Structure-Activity Relationships (2001),

20(2), 143-147

CODEN: QSARDI; ISSN: 0931-8771

PUBLISHER:

Wiley-VCH Verlag GmbH

DOCUMENT TYPE:

Journal

LANGUAGE:

English

We identified new potent inhibitors for ATP-phosphoribosyl transferase, which is the first enzyme in histidine biosynthesis pathway, using three-dimensional database search (3D-search) technique. The 3D-search was based on the structure of product mol., N-1-(5'-phosphoribosyl)-ATP, as a template to find mols. targeting to the binding sites of two substrates (ATP and 5'-phosphoribosyl-1-pyrophosphate), i.e., bi-substrate mimicking. Four com.-available compds. with three different chemical classes were examined out of 36 low-mol. weight compds. selected from the hits of the searches. Amino(chlorophenyl)triazolopyrimidine compds., which are the simplest and smallest ones, showed potent activity (e.g., 92% inhibition at 100 μM). The structural comparison with the product mol. suggests that the simultaneous occupation of two substrate-binding sites likely enhances the enzyme inhibition. The most potent compound examined in this study was a disulfide-bond containing mol. (IC50 = 50 nM), whose mode of action seems to be different from the others.

IT 215925-76-1

CN

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(identification of ATP-phosphoribosyl transferase inhibitors, using three-dimensional structural database search technique)

RN 215925-76-1 CAPLUS

2,4-Quinazolinediamine, 5-[(4-chlorophenyl)methoxy] - (9CI) (CA INDEX NAME)

REFERENCE COUNT:

29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 6 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2001:50631 CAPLUS

DOCUMENT NUMBER:

134:100885

TITLE:

Preparation of quinazolinyl ureas, thioureas and

guanidines for use in the prevention or treatment of T

cell mediated diseases or medical conditions

INVENTOR(S): Crawley, Graham Charles; McKerrecher, Darren; Poyser,

Jeffrey Philip; Hennequin, Laurent Francois Andre;

Ple, Patrick; Lambert, Christine Marie-Paul

PATENT ASSIGNEE(S): Astrazeneca UK Limited, UK; Zeneca Pharma S.A.

SOURCE: PCT Int. Appl., 169 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.					KIND DATE					APPLICATION NO. DATE									
1	WO	2001	0041	02	A1 20010118				V	10 20	00-G	B256	6	20000704						
		W:	ΑE,	AG,	ΑL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	ВG,	BR,	BY,	CA,	CH,	CN,	CR,		
			CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,		
			ID,	IL,	IN,	IS,	JP,	KE,	KG,	KΡ,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,		
			LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	ΝZ,	PL,	PT,	RO,	RU,	SD,	SE,		
			SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,	YU,	ZA,		
			ZW,	AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM								
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,		
			DE,	DK,	ES,	FΙ,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,		
			CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG					
1	BR	2000	0121	57	A 20020402			BR 2000-12157 20000704												
]	ΕP	1218	353		A1 200207			0703	EP 2000-953271						20000704					
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,		
			IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL									
	JP 2003504360						2003	0204	JP 2001-509712						20000704					
2						A 20030228				ZA 2001-9864					20011129					
1	NO	2002	00004	12	A 20020304															
PRIOR	ITY	APP	LN.	INFO	. :				EP 1999-401692 A 19990707											
PRIORITY APPLN. INFO.:									EP 2000-401221 A 20000											
											000-				2000					

OTHER SOURCE(S): MARPAT 134:100885

GΙ

AB The title compds. [I; Q1 = quinazoline ring optionally substituted with halo, CF3 or CN, or a group X1Q3 (wherein X1 = a direct bond, O; Q3 = aryl, arylalkyl, heterocyclyl, (heterocyclyl)alkyl); R2, R3 = H, alkyl; Z = O, S, NH; Q2 = aryl, arylalkyl] and their pharmaceutically-acceptable salts, useful in the prevention or treatment of T cell mediated diseases or medical conditions such as transplant rejection or rheumatoid arthritis, were prepared and formulated. E.g., a multi-step synthesis of

the urea II was given. In general, activity possessed by compds. I may be demonstrated at IC50 of 0.0001-5 μM against enzyme p561ck binding and IC50 of 0.001-10 μM in in vitro T cell proliferation assay (T cell receptor stimulation).

TT 320365-82-0P 320365-83-1P 320365-84-2P 320365-85-3P 320365-86-4P 320365-88-6P 320365-89-7P 320365-91-1P 320365-92-2P 320365-93-3P 320365-94-4P 320365-95-5P 320365-96-6P 320365-97-7P 320365-98-8P 320366-04-9P 320366-06-1P 320366-08-3P 320366-20-9P 320366-22-1P 320366-24-3P 320366-26-5P 320366-28-7P 320366-30-1P 320366-31-2P 320366-46-9P 320366-64-1P 320366-66-3P 320366-70-9P 320366-71-0P

320367-02-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of quinazolinyl ureas; thioureas and guanidines for use in the prevention or treatment of T cell mediated diseases or medical conditions)

RN 320365-82-0 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-[(1-methyl-4-piperidinyl)methoxy]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ \text{Me} & & & \\ & & & \\ & & & \\ \text{Me} & & \\ & & & \\ & & & \\ &$$

RN 320365-83-1 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-[3-(1-piperidinyl)propoxy]- (9CI) (CA INDEX NAME)

$$N - (CH_2)_3 - O$$
 $N - N$
 N

RN 320365-84-2 CAPLUS

CN 4-Quinazolinamine, 7-[3-(4-morpholinyl)propoxy]- (9CI) (CA INDEX NAME)

RN 320365-85-3 CAPLUS

CN 4-Quinazolinamine, 7-[3-(1,1-dioxido-4-thiomorpholinyl)propoxy]- (9CI) (CA INDEX NAME)

RN 320365-86-4 CAPLUS

CN 4-Quinazolinamine, 7-[[4-(4-morpholinyl)-2-butynyl]oxy]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & \text{N---} \text{CH}_2 - \text{C} & \text{C--} \text{CH}_2 - \text{O} \\
\hline
 & \text{NH}_2
\end{array}$$

RN 320365-88-6 CAPLUS

CN 4-Quinazolinamine, 7-[[(2E)-4-(4-morpholinyl)-2-butenyl]oxy]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 320365-89-7 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-[2-(1-piperidinyl)ethoxy]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} N - CH_2 - CH_2 - O & N \\ \hline MeO & NH_2 \end{array}$$

RN 320365-91-1 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-[3-(4-morpholinyl)propoxy]- (9CI) (CA INDEX NAME)

N—
$$(CH_2)_3$$
— O

MeO

NH₂

RN 320365-92-2 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-[3-(4-methyl-1-piperazinyl)propoxy]- (9CI) (CA INDEX NAME)

Me
$$N-(CH_2)_3-O$$
 N
 N
 N
 N
 N
 N
 N

RN 320365-93-3 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-[3-(1-pyrrolidinyl)propoxy]- (9CI) (CA INDEX NAME)

$$N-(CH_2)_3-O$$
 N
 N
 N
 N
 N
 N
 N

RN 320365-94-4 CAPLUS

CN 4-Quinazolinamine, 7-[3-(1,1-dioxido-4-thiomorpholinyl)propoxy]-6-methoxy-(9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 320365-95-5 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-[2-[(2-methoxyethyl)methylamino]ethoxy]-(9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Me} & \\ \text{MeO-} \text{CH}_2\text{-} \text{CH}_2\text{-} \text{N-} \text{CH}_2\text{-} \text{CH}_2\text{-} \text{O} \\ \\ \text{MeO} & \\ \text{NH}_2 & \\ \end{array}$$

RN 320365-96-6 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-[3-(methylsulfonyl)propoxy]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} O \\ \parallel \\ N \\ O \end{array}$$

$$\begin{array}{c} N \\ MeO \end{array}$$

$$\begin{array}{c} N \\ N \\ N \\ NH_2 \end{array}$$

RN 320365-97-7 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-[3-(1H-1,2,3-triazol-1-yl)propoxy]- (9CI) (CA INDEX NAME)

N
$$\sim$$
 (CH₂)₃ \sim 0 \sim N \sim N

RN 320365-98-8 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-[2-(4-pyridinyl)ethoxy]- (9CI) (CA INDEX NAME)

RN 320366-04-9 CAPLUS

CN 4-Quinazolinamine, 7-[2-(dimethylamino)ethoxy]-6-methoxy- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me}_2\text{N}-\text{CH}_2-\text{CH}_2-\text{O} \\ \text{MeO} \end{array}$$

RN 320366-06-1 CAPLUS

CN 2-Imidazolidinone, 1-[2-[(4-amino-6-methoxy-7-quinazolinyl)oxy]ethyl]-(9CI) (CA INDEX NAME)

RN 320366-08-3 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-[2-(1-pyrrolidinyl)ethoxy]- (9CI) (CA INDEX NAME)

$$N - CH_2 - CH_2 - O$$

$$MeO$$

$$NH_2$$

RN 320366-10-7 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-[2-(4-morpholinyl)ethoxy]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} N - CH_2 - CH_2 - O \\ \hline \\ N + CH_2 - CH_2 - O \\ \hline \\ N + CH_2$$

RN 320366-14-1 CAPLUS

CN 4-Quinazolinamine, 7-[2-(1-pyrrolidinyl)ethoxy]- (9CI) (CA INDEX NAME)

RN 320366-18-5 CAPLUS

CN 4-Quinazolinamine, 7-[2-(1-piperidinyl)ethoxy]- (9CI) (CA INDEX NAME)

$$N - CH_2 - CH_2 - O$$
 $N - CH_2 - CH_2 - O$
 $N - CH_2 - CH_2 - O$

RN 320366-20-9 CAPLUS

CN 4-Quinazolinamine, 7-[2-(4-methyl-1-piperazinyl)ethoxy]- (9CI) (CA INDEX

NAME)

$$\begin{array}{c|c} N & CH_2 - CH_2 - O \\ \hline N & NH_2 \end{array}$$

RN 320366-22-1 CAPLUS

CN 4-Quinazolinamine, 7-[(1-methyl-3-piperidinyl)methoxy]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ N & & & \\ \text{Me} & & & \\ & & & \\ N & & & \\ N &$$

RN 320366-24-3 CAPLUS

CN 4-Quinazolinamine, 7-[3-(1-pyrrolidinyl)propoxy]- (9CI) (CA INDEX NAME)

$$N \longrightarrow (CH_2)_3 - O \longrightarrow N$$
 NH_2

RN 320366-26-5 CAPLUS

CN 4-Quinazolinamine, 7-[3-(4-methyl-1-piperazinyl)propoxy]- (9CI) (CA INDEX NAME)

RN 320366-28-7 CAPLUS

CN 4-Quinazolinamine, 7-[3-(1H-1,2,3-triazol-1-yl)propoxy]- (9CI) (CA INDEX NAME)

RN 320366-30-1 CAPLUS

CN 4-Quinazolinamine, 7-[[(2E)-4-(1-pyrrolidinyl)-2-butenyl]oxy]- (9CI) (CF INDEX NAME)

Double bond geometry as shown.

RN 320366-31-2 CAPLUS

CN 4-Piperidinecarboxamide, 1-[3-[(4-amino-6-methoxy-7-quinazolinyl)oxy]propyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & \\ & & & \\ & & \\ & & \\ & & & \\ & & \\ & & & \\ & & \\ & & & \\ & & \\ & & & \\ & & \\ & &$$

RN 320366-46-9 CAPLUS

CN 4-Quinazolinamine, 7-(cyclopropylmethoxy)-6-methoxy- (9CI) (CA INDEX NAME)

RN 320366-64-1 CAPLUS

CN Carbamic acid, [[1-[3-[(4-amino-6-methoxy-7-quinazolinyl)oxy]propyl]-4-piperidinyl]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

t-BuO-C-NH-CH₂
$$N$$
— (CH₂)₃-O N — MeO N

RN 320366-66-3 CAPLUS

CN 4-Quinazolinamine, 7-methoxy-6-[3-(4-morpholinyl)propoxy]- (9CI) (CF INDEX NAME)

$$\begin{array}{c|c} & \text{MeO} & \text{N} \\ \hline \text{N} & \text{(CH2)} & \text{3} & \text{O} \\ \hline \end{array}$$

RN 320366-70-9 CAPLUS

CN 4-Quinazolinamine, 7-methoxy-6-[3-(1-piperidinyl)propoxy]- (9CI) (CA INDEX NAME)

RN 320366-71-0 CAPLUS

CN 4-Quinazolinamine, 7-methoxy-6-[2-(1-pyrrolidinyl)ethoxy]- (9CI) (CA INDEX NAME)

RN 320367-02-0 CAPLUS

CN 4-Quinazolinamine, 6-methoxy-7-(phenylmethoxy)- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 7 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

9

ACCESSION NUMBER:

2000:529192 CAPLUS

DOCUMENT NUMBER:

133:131727

TITLE:

Mammalian DNA primase screens and activity modulating

agents

INVENTOR(S):

Kozlowski, Michael; Aimi, Junko

PATENT ASSIGNEE(S):

Geron Corporation, USA

SOURCE:

U.S., 21 pp., Cont.-in-part of U.S. Ser. No. 624,343,

abandoned.
CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO. DATE
US 6096499	A	20000801	US 1997-828192 19970321
US 6274738	B1	20010814	US 1997-977651 19971124
PRIORITY APPLN. INFO	. :		US 1996-624343 B2 19960322
			US 1997-828192 A2 19970321

The invention provides DNA primase assays suitable for identifying DNA AB primase modulating agents, methods of modulating DNA primase activity and compns. which modulate DNA primase. In one assay of the invention, a probe is hybridized to a primase reaction product, with the amount of probe bound providing a measure of activity for the primase enzyme. The probe or product may be immobilized or captured on a solid surface, which is optionally washed to remove non-specifically bound components after hybridization with primase reaction products or probes in the products. Optionally, the assay includes a blocking agent, such as albumin, a nonfat milk protein, polyvinyl pyrrolidone, or Ficoll. The assay identifies DNA primase modifiers which produce: (1) a detectable alteration in DNA primase activity, such as the capacity of a DNA primase to initiate oligoribonucleotide primer synthesis and/or the rate of chain elongation of a nascent oligoribonucleotide primer catalyzed by DNA primase either alone or in conjunction with DNA polymerase α ; and/or (2) a detectable alteration in the capacity or rate of a DNA primase/DNA polymerase complex to extend oligoribonucleotide primers by template-directed addition of deoxyribonucleotides; and/or (3) a detectable alteration in the binding capacity, binding affinity, or functional interaction between a DNA primase and an accessory protein.

IT 215925-77-2

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(primase modulator; mammalian DNA primase screens and activity modulating agents)

RN 215925-77-2 CAPLUS

CN 2,4-Quinazolinediamine, 5-[(4-methylphenyl)methoxy]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 8 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2000:439100 CAPLUS

DOCUMENT NUMBER:

133:171750

TITLE:

Selectivity analysis of 5-(arylthio)-2,4-

diaminoquinazolines as inhibitors of Candida albicans

dihydrofolate reductase by molecular dynamics

simulations

AUTHOR (S):

Gokhale, Vijay M.; Kulkarni, Vithal M.

CORPORATE SOURCE:

Pharmaceutical Division, Department of Chemical Technology, University of Mumbai, Mumbai, 400 019,

SOURCE:

Journal of Computer-Aided Molecular Design (2000),

14(5), 495-506

CODEN: JCADEQ; ISSN: 0920-654X

Kluwer Academic Publishers

DOCUMENT TYPE:

Journal

PUBLISHER: LANGUAGE:

English

A series of 5-(arylthio)-2,4-diaminoquinazolines are known as selective inhibitors of dihydrofolate reductase (DHFR) from Candida albicans. We have performed docking and mol. dynamics simulations of these inhibitors with C. albicans and human DHFR to understand the basis for selectivity of these agents. Study was performed on a selected set of 10 compds. with variation in structure and activity. Mol. dynamics simulations were performed at 300 K for 45 ps with equilibration for 10 ps. Trajectory data was analyzed on the basis of hydrogen bond interactions, energy of binding and conformational energy difference. The results indicate that hydrogen bonds formed between the compound and the active site residues are responsible for inhibition and higher potency. The selectivity index, i.e. the ratio of I50 against human DHFR to I50 against fungal DHFR, is mainly determined by the conformation adapted by the compds. Within the active site of two enzymes. Since the human DHFR active site is rigid, the compound is trapped in a higher energy conformation. This energy difference between the two conformations AE mainly governs the selectivity against fungal DHFR. The information generated from this anal. of potency and selectivity should be useful for further work in the area of antifungal research.

168910-96-1 IT

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study) (selectivity anal. of 5-(arylthio)-2,4-diaminoquinazolines as inhibitors of Candida albicans dihydrofolate reductase by mol. dynamics simulations)

168910-96-1 CAPLUS RN

2,4-Quinazolinediamine, 5-[[4-(1,1-dimethylethyl)phenyl]thio]-6-(2-CN methylpropoxy) - (9CI) (CA INDEX NAME)

REFERENCE COUNT:

23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 9 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1999:344836 CAPLUS

DOCUMENT NUMBER:

131:689

INVENTOR (S):

TITLE:

Small molecule intervention in HIV-1 replication Czarnik, Anthony William; Mack, David Phillip; Mei,

Houng-Yau; Moreland, David Winslow

PATENT ASSIGNEE(S):

Warner-Lambert Company, USA

SOURCE:

PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	CENT :	NO.		KI	ND .	DATE			A.	PPLI	CATI	ои ис	Э.	DATE			
	-																
WO	9925	327		A:	2	1999	0527		W	0 19	98-U	5193	58	1998	0916		
WO	9925	327		A:	3	1999	0923										
	W:	AL,	AU,	BA,	BB,	BG,	BR,	CA,	CN,	CU,	CZ,	EE,	GE,	HR,	HU,	ID,	IL,
		IS,	JP,	ΚP,	KR,	LC,	LK,	LR,	LT,	LV,	MG,	MK,	MN,	MX,	NO,	NΖ,	PL,
		RO,	SG,	SI,	SK,	SL,	TR,	TT,	UA,	US,	ŲΖ,	VN,	YU,	AM,	ΑZ,	BY,	KG,
		KΖ,	MD,	RU,	ΤJ,	TM											
	RW:	GH,	GM,	KE,	LS,	MW,	SD,	SZ,	UG,	ZW,	AT,	ΒE,	CH,	CY,	DE,	DK,	ES,
		FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,
		CM,	GA,	GN,	GW,	ΜL,	MR,	ΝE,	SN,	TD,	TG						
AU	9893	182		A:	1	1999	0607		Αl	U 19	98-93	3182		1998	0916		
PRIORITY	APP	LN.	INFO	. :				1	US 1:	997-	6555	9P	Ρ	1997	1114		
								1	WO 1:	998-1	US19	358	W	1998	0916		

OTHER SOURCE(S):

MARPAT 131:689

A series of small mols. which are inhibitors of HIV-1 Tat-TAR interaction is disclosed. The compds. are useful in the treatment of HIV-1 infections. Compds. of the invention include quinoxalinediones and diaminoquinazolines.

IT 225504-32-5

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(small mol. intervention in HIV-1 replication)

225504-32-5 CAPLUS RN

2,4-Quinazolinediamine, 6,6'-[1,3-propanediylbis(oxy)]bis- (9CI) CN INDEX NAME)

$$NH_2$$
 NH_2
 NH_2
 NH_2
 NH_2
 NH_2

ANSWER 10 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1999:31977 CAPLUS

DOCUMENT NUMBER:

130:81523

TITLE:

Preparation of quinolines and quinazolines useful in

the treatment of benign prostatic hyperplasia

Fox, David Nathan Abraham; Mantell, Simon John; INVENTOR(S):

Collis, Alan John

PATENT ASSIGNEE(S):

Pfizer Limited, UK; Pfizer Inc.

SOURCE: Eur. Pat. Appl., 30 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	ENT I	NO.		KI	ND	DATE			ΑP	PLI	CATI	ON N	ο.	DATE			
												0200		1000	0E10		
EP	8873	44		A	1	1998	1230		EP	19	98-3	0389	/	1998	0210		
EP	8873			B		2003											
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO										
US	6048	864		Α		2000	0411		US	19	98-6	7588		1998	0428		
AT	2555	63		Ε		2003	1215		AT	19	98-3	0389	7	1998	0518		
CA	2239	603		\mathbf{A}	A	1998	1205		CA	. 19	98-2	2396	03	1998	0603		
CA	2239	603		С		2003	0722										
JP	1101	2274		A:	2	1999	0119		JP	19	98-1	5610	7	1998	0604		
JР	3163	281	•	В	2	2001	0508										
BR	9801	778		Α		2000	0321		BR	19	98-1	778		1998	0604		
US	6417	194		В	1	2002	0709		US	20	00-4	9962	3	2000	0207		
PRIORITY	APP	LN.	INFO	. :				G	B 19	97-	1165	0	Α	1997	0605		
								Ü	IS 19	98-	6758	8	A3	1998	0428		
OMITED CO	אווספני	/C) .			M/A E	ידי אומו	120.	21523									

OTHER SOURCE(S):

MARPAT 130:81523

GΙ

$$R^1$$
 R^2
 R^3
 N
 R^4
 R^4
 R^3
 N
 R^4
 R^4
 R^4
 R^2
 R^3
 N
 R^4
 R^4

The title compds. [I; R1 = C1-4 alkoxy optionally substituted by one or more F atoms; R2, R3 = H, (un) substituted C1-6 alkoxy; R4 = (un) substituted 4-7 membered heterocyclic ring containing at least one heteroatom selected from N, O and S which may be optionally fused to a benzene ring or a 5-6 membered heterocyclic ring; X = CH, N; L = absent, II (wherein A is attached to R4; A = CO, SO2; Z = CH, N; m = 1-2, and in addition, when Z = CH, m = 0; n = 1-3; provided that m + n = 2-5), -N(R5)(CH2)pZ(R6)A- (wherein A and Z as defined above; R5, R6 = H, C1-4 alkyl; p = 1-3, and in addition, when Z = CH, p = 0)], useful in therapy, in particular in the treatment of benign prostatic hyperplasia, were prepared Thus, reaction of 4-amino-6-hydroxy-7-methoxy-2-[4-(4-morpholinecarbonyl)-1,4-diazepan-1-yl]quinazoline (preparation given) with (iodomethyl)cyclobutane afforded III which showed pA2 of 9.2 in "Contractile responses of human prostate" screening.

IT 192869-59-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU

CN

(Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of quinolines and quinazolines useful in the treatment of benign prostatic hyperplasia)

RN 192869-59-3 CAPLUS

1H-1,4-Diazepine, 1-[4-amino-7-methoxy-6-(phenylmethoxy)-2-quinazolinyl]hexahydro-4-(4-morpholinylcarbonyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ \text{MeO} & & & \\ & & & \\ \text{Ph-} & \text{CH}_2 - \text{O} & \\ & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ &$$

IT 218961-94-5P 218961-95-6P 218961-97-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of quinolines and quinazolines useful in the treatment of benign prostatic hyperplasia)

RN 218961-94-5 CAPLUS

CN 1H-1,4-Diazepine, 1-[4-amino-6-[(4-fluorophenyl)methoxy]-7-methoxy-2-quinazolinyl]hexahydro-4-(4-morpholinylcarbonyl)-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 218961-95-6 CAPLUS

CN 1H-1,4-Diazepine, 1-[4-amino-6-(cyclobutylmethoxy)-7-methoxy-2-quinazolinyl]hexahydro-4-(4-morpholinylcarbonyl)- (9CI) (CA INDEX NAME)

RN 218961-97-8 CAPLUS

CN 1H-1,4-Diazepine, 1-[4-amino-7-methoxy-6-(phenylmethoxy)-2-quinazolinyl]hexahydro-4-[(tetrahydro-2-furanyl)carbonyl]- (9CI) (CA

INDEX NAME)

$$\begin{array}{c|c} \text{MeO} & \text{N} & \text{N} & \text{N} & \text{O} \\ \text{Ph-CH}_2-\text{O} & \text{NH}_2 & \text{O} & \text{O} \\ \text{NH}_2 & \text{N} & \text{N} & \text{O} & \text{O} \\ \end{array}$$

IT 60548-02-9P 192869-58-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of quinolines and quinazolines useful in the treatment of benign prostatic hyperplasia)

60548-02-9 CAPLUS RN

4-Quinazolinamine, 2-chloro-7-methoxy-6-(phenylmethoxy)- (9CI) CN NAME)

192869-58-2 CAPLUS RN

2(1H)-Quinazolinone, 4-amino-7-methoxy-6-(phenylmethoxy)- (9CI) (CA INDEX CN NAME)

$$\begin{array}{c|c} \text{MeO} & \text{H} & \text{N} \\ \text{N} & \text{N} \\ \text{N} & \text{N} \\ \text{NH}_2 & \text{N} \end{array}$$

REFERENCE COUNT:

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5ANSWER 11 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

8

ACCESSION NUMBER:

1998:745041 CAPLUS

DOCUMENT NUMBER:

130:10618

TITLE:

Modulating serine/threonine protein kinase function with quinazoline-based compounds and their use as

antitumor and anti-fibrotic agents

INVENTOR(S):

Tang, Peng C.; McMahon, Gerald; Weinberger, Heinz;

Kutscher, Bernhard; App, Harald

PATENT ASSIGNEE(S):

Sugen, Inc., USA

SOURCE:

PCT Int. Appl., 147 pp.

DOCUMENT TYPE:

CODEN: PIXXD2

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

```
APPLICATION NO. DATE
                     KIND DATE
     PATENT NO.
                                           ______
                      _ _ _ _
                                                            19980501
                                          WO 1998-US9060
     WO 9850370
                            19981112
         W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
            DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG,
             KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
            NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
             UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA, GN, ML, MR, NE, SN, TD, TG
                                           ZA 1998-3669
                                                            19980430
     ZA 9803669
                       Α
                            19991101
                                           AU 1998-72829
                                                            19980501
     AU 9872829
                       Α1
                            19981127
                                           EP 1998-920203
                                                            19980501
                            20000301
     EP 981519
                       Α1
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
                                                            19980501
                                           US 1998-71682
                       B1
                            20010320
     US 6204267
                                                            19980501
                                           JP 1998-548336
     JP 2001524128
                       T2
                            20011127
                                           US 2001-769360
                                                            20010126
     US 2001014679
                       Α1
                            20010816
                                        US 1997-45351P
                                                       P 19970502
PRIORITY APPLN. INFO.:
                                        US 1997-60152P
                                                         P 19970926
                                        US 1998-71682
                                                         A3 19980501
                                        WO 1998-US9060
                                                         W 19980501
                         CASREACT 130:10618; MARPAT 130:10618
OTHER SOURCE(S):
GΙ
```

$$R_1$$
 X
 R_3
 N
 R_2
 I

The present invention is directed in part towards methods of modulating the function of serine/threonine protein kinases with quinazoline-based compds (I). The methods incorporate cells that express a serine/threonine protein kinase, such as RAF. In addition, the invention describes methods of preventing and treating serine/threonine protein kinase-related abnormal conditions (e.g., tumors, fibrotic disorders, or other signal transduction aberrations) in organisms with a compound identified by the invention. Furthermore, the invention pertains to quinazoline compds. and pharmaceutical compns. comprising these compds. Syntheses and biol. activities are are provided for 38 quinazoline-based compds.

IT 215925-76-1P 215925-77-2P 215925-78-3P 215925-99-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(modulating serine/threonine protein kinase function with quinazoline-based compds. and their use as antitumor and anti-fibrotic agents)

215925-76-1 CAPLUS

RN

CN 2,4-Quinazolinediamine, 5-[(4-chlorophenyl)methoxy]- (9CI) (CA INDEX NAME)

RN 215925-77-2 CAPLUS
CN 2,4-Quinazolinediamine, 5-[(4-methylphenyl)methoxy]- (9CI) (CA INDEX NAME)

RN 215925-78-3 CAPLUS
CN 2,4-Quinazolinediamine, 5-[[4-(trifluoromethyl)phenyl]methoxy]- (9CI) (CA
INDEX NAME)

RN 215925-99-8 CAPLUS CN 2,4-Quinazolinediamine, 5-[3-(dimethylamino)propoxy]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 12 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1998:721497 CAPLUS

DOCUMENT NUMBER:

130:3852

TITLE:

Quinoline and quinazoline compounds useful in therapy

of benign prostatic hyperplasia

INVENTOR(S):

Collis, Alan John; Fox, David Nathan Abraham

PATENT ASSIGNEE(S):

Pfizer Limited, UK; Pfizer Inc.

SOURCE:

Eur. Pat. Appl., 26 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 875506	A1	19981104	EP 1998-302968	19980416
EP 875506				
			FR, GB, GR, IT, LI, LU,	NL, SE, MC, PT,
		, FI, RO		
AT 233242	E	20030315	AT 1998-302968	19980416
ES 2190809	Т3	20030816	ES 1998-302968	19980416
CA 2236239	AA	19981101	CA 1998-2236239	19980429
CA 2236239	C	20030318		
BR 9801506	A	20000208	BR 1998-1506	19980429
JP 10316664				19980501
JP 3076786	B2	20000814		
MX 9803607	A	20000131	MX 1998-3607	19980504
US 2003045525	A1	20030306	US 2002-252852	20020923
US 6649620	B2	20031118		
US 2004034032		20040219	US 2003-640314	20030813
PRIORITY APPLN. INFO			GB 1997-8917 A	19970501
			US 1998-67608 B1	19980428
			US 2000-591195 B1	
			US 2002-252852 A3	
			05,2002-252052 H3	20020923

OTHER SOURCE(S):

MARPAT 130:3852

GΙ

$$\mathbb{R}^{1}$$
 \mathbb{R}^{2}
 \mathbb{R}^{2}
 \mathbb{R}^{3}
 \mathbb{R}^{3}
 \mathbb{R}^{2}
 \mathbb{R}^{3}

$$\begin{array}{c|c} & & & & & & \\ & & & & & \\ \text{MeO} & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & &$$

Title compds. I [wherein R1 = C1-4 alkoxy (un) substituted by 1 or more F ΔR atoms; R2 = aryl or heteroaryl, (un) substituted by C1-4 alkyl or SO2NH2; R3 = 4-, 5-, 6-, or 7-membered heterocyclic ring containing at least 1heteroatom selected from N, O, and S, the ring being optionally fused to a benzene ring or a 5- or 6-membered heterocyclic ring containing at least 1 heteroatom selected from N, O, and S, the ring system as a whole being (un) substituted by OH, C1-4 alkyl, C1-4 alkoxy, halo, and/or NHSO2-(C1-4 alkyl); X = CH or N; L = certain cyclic or chain amino groups; or L may be absent] and their pharmaceutically acceptable salts are useful in the treatment of a variety of disorders including benign prostatic hyperplasia (no data). Examples include syntheses of approx. 20 compds. I and a variety of intermediates. For instance, 5-hydroxy-4-methoxy-2nitrobenzoic acid was converted to the Me ester (87%), followed by conversion to the 5-triflate (85%), Pd-catalyzed phenylation of the latter (99%), reduction of the nitro group to amino (99%), and 2-step cyclization with sodium cyanate (91%), to give 7-methoxy-6-phenylquinazoline-2,4dione. Treatment of this with POCl3 and then methanolic NH3 gave 55% 4-amino-2-chloro-7-methoxy-6-phenylquinazoline, which was condensed with 1-(4-morpholinesulfonyl)-1,4-diazepane HCl (16%) to give title compound II.HCl.

II

IT 60548-02-9P, 4-Amino-6-(benzyloxy)-2-chloro-7-methoxyquinazoline 192869-58-2P, 4-Amino-6-(benzyloxy)-2-hydroxy-7-methoxyquinazoline 192869-59-3P, 4-Amino-6-(benzyloxy)-7-methoxy-2-[4-(4-morpholinecarbonyl)-1,4-diazepan-1-yl]quinazoline RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of quinoline and quinazoline derivs. for therapy of benign prostatic hyperplasia)

RN 60548-02-9 CAPLUS

CN 4-Quinazolinamine, 2-chloro-7-methoxy-6-(phenylmethoxy)- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} & \text{N} & \text{C1} \\ \text{Ph-CH}_2 - \text{O} & \text{NH}_2 \end{array}$$

192869-58-2 CAPLUS RN

2(1H)-Quinazolinone, 4-amino-7-methoxy-6-(phenylmethoxy)- (9CI) (CA INDEX CN NAME)

$$\begin{array}{c|c} \text{MeO} & \overset{H}{\text{N}} & \text{O} \\ \text{Ph-} & \text{CH}_2 - \text{O} & & \text{NH}_2 \\ \end{array}$$

192869-59-3 CAPLUS RN

1H-1,4-Diazepine, 1-[4-amino-7-methoxy-6-(phenylmethoxy)-2-CN quinazolinyl]hexahydro-4-(4-morpholinylcarbonyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ \text{MeO} & & & \\ & & & \\ \text{Ph}-\text{CH}_2-\text{O} & & \\ & &$$

REFERENCE COUNT:

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 13 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

7

ACCESSION NUMBER:

1997:506728 CAPLUS

DOCUMENT NUMBER:

127:121749

TITLE:

Preparation of quinolines and quinazolines for

treatment of benign prostatic hyperplasia

INVENTOR(S):

Collis, Alan John; Fox, David Nathan Abraham; Newman,

Julie

PATENT ASSIGNEE(S):

Pfizer Research and Development Company, N.V./S.A, UK;

Pfizer Inc.; Collis, Alan John; Fox, David Nathan

Abraham; Newman, Julie

SOURCE:

PCT Int. Appl., 78 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT	NO.		KIND	DATE			A.	PPLI	CATI	ON N	ο. :	DATE			
							-								
WO 972	3462		A1	1997	0703		WO 1996-EP5609 19961205								
			BR, BY											LV,	MX,
	NO,	NZ,	PL, RC	, RU,	SG,	SI,	SK,	TR,	UA,	US,	UZ,	VN			
RW	: AT,	ВE,	CH, DE	, DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	ΙT,	LU,	MC,	NL,	PT,
	SE,	BF,	BJ, CF	CG,	CI,	CM,	GΑ,	GN,	ML,	MR,	ΝE,	SN,	TD,	TG	
AU 971	3719		A1	1997	0717		A	U 19:	97-13	3719		1996	1205		
AU 708	979		B2	1999	0819										
EP 877	734		A1	1998	1118		E	P 19	96-94	4395	4	1996	1205		
EP 877			B1	2000											
R:	ΑT,	BE,	CH, DE	, DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	ΝL,	SE,	PT,	ΙE,

GI

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SI, LV, FI, RO
                                        CN 1996-199303
                                                         19961205
                A
                          19990120
    CN 1205693
                                                         19961205
                          19990713
                                        BR 1996-12263
    BR 9612263
                    Α
                                                         19961205
                          20000715
                                        AT 1996-943954
                     E
    AT 194598
                    B2
                          20000731
                                        JP 1997-523272
                                                         19961205
    JP 3070958
                     T2
                          19990209
    JP 11501668
                                        ES 1996-943954
                                                         19961205
                     Т3
                          20001216
    ES 2151192
                                        PT 1996-96943954 19961205
                     T
                          20001229
    PT 877734
                     С
                          20010918
                                        CA 1996-2236814 19961205
    CA 2236814
                          19980622
                                        ZA 1996-10784
                                                         19961220
                     Α
    ZA 9610784
                    A
                          20000815
                                        US 1998-91370
                                                         19980617
    US 6103738
                                                         19980622
                     Α
                          19980730
                                        NO 1998-2913
    NO 9802913
                    Т3
                                        GR 2000-401910
                                                         20000817
    GR 3034225
                          20001229
                                        US 2001-812083
                                                         20010319
                    A1
                          20020425
    US 2002049322
                     B2
                          20031104
    US 6642242
                          20031127
                                        US 2003-455546
                                                         20030604
                     A1
    US 2003220332
                                                     A 19951223
PRIORITY APPLN. INFO.:
                                      GB 1995-26546
                                                      W 19961205
                                      WO 1996-EP5609
                                                      A3 19980617
                                      US 1998-91370
                                      US 2000-613500
                                                      B1 20000710
                                      US 2001-812083
                                                     A3 20010319
OTHER SOURCE(S):
                       MARPAT 127:121749
```

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

The title compds. [I; R1 = C1-4 alkoxy optically substituted by one or AB more F atoms; R2 = H, C1-6 alkoxy optionally substituted by one or more F atoms; R3 = H, halo, C1-4 alkoxy, CF3; R2R3 = OCH2, the methylene group being attached to the ortho-position of the pendant Ph ring; R4 = 4-6-membered heterocyclic ring containing 1-2 heteroatoms selected from N, O and S, the ring being optionally fused to a benzene ring, (un) substituted 5-6-membered heterocyclic ring containing 1-2 heteroatoms selected from N, O and S; X = CH, N; L = a bond, II (wherein N is attached to the 2-position of the quinoline or quinazoline ring; A = a bond, CO, SO2; Z = CH, N; m = 0-2; n = 1-3), N(R6) (CH2)pZ'(R7)A' (wherein N is attached to the 2-position of the quinoline or quinazoline ring; A', Z' = A, Z; R6, R7 = H, C1-4 alkyl; p = 0-3)], useful in the treatment of inter alia benign prostatic hyperplasia, were prepared Thus, reacting N-benzyl-3S,4S-bis(tertbutyldimethylsilyloxy)pyrrolidine with phosgene in PhMe followed by treatment of the intermediate with homopiperazine in THF, and reaction of the resulting $1-\{1-[3S,4S-bis(tert-butyldimethylsilyloxy)pyrrolidine]carbo$ nyl}-1,4-diazepane with 4-amino-2-chloro-6,7-dimethoxy-5-phenylquinazoline in the presence of Et3N in n-BuOH afforded (3S,4S)-III.HCl which showed pA2 of 8.5.

IT 60548-02-9P 192869-58-2P 192869-59-3P 192869-61-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of quinolines and quinazolines for treatment of benign prostatic hyperplasia)

RN 60548-02-9 CAPLUS

CN 4-Quinazolinamine, 2-chloro-7-methoxy-6-(phenylmethoxy)- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} & \text{N} & \text{Cl} \\ \text{Ph-CH}_2 - \text{O} & \text{NH}_2 \end{array}$$

RN 192869-58-2 CAPLUS

CN 2(1H)-Quinazolinone, 4-amino-7-methoxy-6-(phenylmethoxy)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{MeO} & \text{H} & \text{O} \\ \hline \text{Ph-CH}_2 - \text{O} & \text{NH}_2 \\ \end{array}$$

RN 192869-59-3 CAPLUS

CN 1H-1,4-Diazepine, 1-[4-amino-7-methoxy-6-(phenylmethoxy)-2-quinazolinyl]hexahydro-4-(4-morpholinylcarbonyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ \text{Ph-CH}_2-\text{O} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & &$$

RN 192869-61-7 CAPLUS

CN 1H-1,4-Diazepine, 1-[4-amino-6-[(2-bromophenyl)methoxy]-7-methoxy-2-quinazolinyl]hexahydro-4-(4-morpholinylcarbonyl)- (9CI) (CA INDEX NAME)

L5 ANSWER 14 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1995:746895 CAPLUS

DOCUMENT NUMBER:

123:256633

TITLE:

Selective Inhibitors of Candida albicans Dihydrofolate

Reductase: Activity and Selectivity of 5-(Arylthio)-2,4-diaminoquinazolines

AUTHOR(S):

SOURCE:

Chan, Joseph H.; Hong, Jean S.; Kuyper, Lee F.; Baccanari, David P.; Joyner, Suzanne S.; Tansik,

Robert L.; Boytos, Christine M.; Rudolph, Sharon K.

CORPORATE SOURCE:

Division of Organic Chemistry, Burroughs Wellcome Company, Research Triangle Park, NC, 27709, USA

Journal of Medicinal Chemistry (1995), 38(18), 3608-16

CODEN: JMCMAR; ISSN: 0022-2623

American Chemical Society

PUBLISHER:

Journal

DOCUMENT TYPE: English LANGUAGE:

The recent increase in fungal infections, especially among AIDS patients, has AΒ resulted in the need for more effective antifungal agents. This search for such agents was focused on developing compds. which inhibit fungal dihydrofolate reductase (DHFR). A series of 25 5-(arylthio)-2,4diaminoquinazolines were synthesized as potentially selective inhibitors of Candida albicans DHFR. The majority of the compds. were potent inhibitors of C. albicans DHFR and much less active against human DHFR. High selectivity, as defined by the ratio of the I50 values for human and C. albicans DHFR, was achieved by compds. with bulky and rigid 4-substituents in the phenylthio moiety. For example, 5-[(4-morpholinophenyl)thio]-2,4-diaminoquinazoline displayed a selectivity ratio of 540 and was the most selective inhibitor synthesized to date. Substitution in the 2- or 3-position of the 5-phenylthio group provided only marginal selectivity. 6-Substituted-5-[(4-tertbutylphenyl)thio]-2,4-diaminoquinazolines showed potent activity against the C. albicans enzyme but were equally active against human DHFR. Most of the selective compds. were also good inhibitors of C. albicans cell growth, with min. inhibitory concentration values as low as 0.05 µg/mL.

168910-96-1P IT

CN

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation of (arylthio)quinazolinediamines as fungicides)

168910-96-1 CAPLUS RN

2,4-Quinazolinediamine, 5-[[4-(1,1-dimethylethyl)phenyl]thio]-6-(2methylpropoxy) - (9CI) (CA INDEX NAME)

ANSWER 15 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1995:276715 CAPLUS

DOCUMENT NUMBER:

122:128394

TITLE:

Structure-activity and structure-selectivity studies

on diaminoquinazolines and other inhibitors of Pneumocystis carinii and Toxoplasma gondii

dihydrofolate reductase

AUTHOR(S): CORPORATE SOURCE: Rosowsky, Andre; Hynes, John B.; Queener, Sherry F. Dana-Farber Cancer Inst., Harvard Med. Sch., Boston, MA, 02115, USA

Antimicrobial Agents and Chemotherapy (1995), 39(1), SOURCE:

CODEN: AMACCQ; ISSN: 0066-4804 American Society for Microbiology

PUBLISHER: DOCUMENT TYPE:

Journal English LANGUAGE:

Twenty-eight 2,4-diaminoquinazolines with alkyl, halogen, or alkoxy groups at the 5-, 6-, and/or 7-position, eight 2,4-diaminopteridines with alkyl and aralkyl groups at the 6- and 7-positions, five 1,3-diamino-7,8,9,10tetrahydropyrimido[4,5-c]isoquinolines with an alkyl, alkylthio, or aryl group at the 6-position, and nine 4,6-diamino-1,2-dihydro-s-triazines with one or two alkyl groups at the 2-position and a substituted Ph or naphthyl group at the 1-position were evaluated as inhibitors of dihydrofolate reductase enzymes from Pneumocystis carinii, Toxoplasma gondii, and rat liver. Halogen substitution at the 5- or 6-position of 2.4-diaminoquinazoline favored selective binding to the P. carinii enzyme but not the T. gondii enzyme. For example, the 50% inhibitory concns. of 2,4-diamino-6-chloroquinazoline as an inhibitor of P. carinii, T. gondii, and rat liver dihydrofolate reductase were 3.6, 14, and 29 μM , resp., corresponding to 12-fold selectively for the P. carinii enzyme but only marginal selectivity for the T. gondii enzyme. Greater than fivefold selectively for P. carinii but not T. gondii dihydrofolate reductase was also observed for the 2,4-diaminoquinazoline favored selective binding to the P. carinii enzyme but not the T. gondii enzyme. For example, the 50% inhibitory concns. of 2,4-diamino-6-chloroquinazoline as an inhibitor of P. carinii, T. gondii, and rat liver dihydrofolate reductase were 3.6, 14, and 29 µM, resp., corresponding to 12-fold selectively for the P. carinii enzyme but only marginal selectivity for the T. gondii enzyme. Greater than fivefold selectivity for P. carinii but not T. gondii dihydrofolate reductase was also observed for the 2,4-diaminoquinazolines with 5-Me, 5-fluoro, 5- and 6-bromo, 6-chloro, and 5-chloro-6-bromo substitution. In contrast, alkyl and aralkyl substitution at the 6- and 7-positions of 2,4-diaminopteridines was a favorable feature for selective inhibition of the T. gondii enzyme and, in two cases, for both enzymes. Nine of the fifty-one compds. tested against P. carinii dihydrofolate reductase and four of the thirty compds. tested against T. gondii dihydrofolate reductase displayed fivefold or greater selectively for the microbial enzyme vs. the rat liver enzyme. The most selective against both enzymes was 2,4-diamino-6,7-bis(cyclohexylmethyl)pteridine, with a selectivity ratio 2 orders of magnitude greater than the value reported for trimetrexate and piritrexim. Since substitution at the 7-position is generally considered to be detrimental to the binding of 2,4-diaminopteridines and related compds. to mammalian dihydrofolate reductase, the selectivity observed in this study with the 6,7-bis(cyclohexylmethyl) analog may represent a useful approach to enhancing selective inhibition of the enzyme from nonmammalian species.

123241-92-9 160854-75-1 160854-76-2

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(structure-activity studies on diaminoquinazolines and other inhibitors of Pneumocystis carinii and Toxoplasma gondii dihydrofolate reductase) 123241-92-9 CAPLUS

2,4-Quinazolinediamine, 5-propoxy- (9CI) (CA INDEX NAME)

IT

RN

CN

RN 160854-75-1 CAPLUS

2,4-Quinazolinediamine, 5-(2,2,3,3,3-pentafluoropropoxy)- (9CI) (CA INDEX CN

160854-76-2 CAPLUS RN

2,4-Quinazolinediamine, 5-(2,2,3,3,4,4,4-heptafluorobutoxy)- (9CI) CNINDEX NAME)

CAPLUS COPYRIGHT 2004 ACS on STN ANSWER 16 OF 25 L_5

ACCESSION NUMBER:

1994:315146 CAPLUS

DOCUMENT NUMBER:

120:315146

TITLE:

The aminoquinazoline group as a replacement for the salicylamide group: The design and synthesis of a novel highly selective β1 adrenoceptor partial

agonist

AUTHOR (S):

Block, Michael H.; Kenny, Peter W.; Thomson, David S.;

Yu, Man Tat

CORPORATE SOURCE:

ICI Pharm., Alderley Park/Macclesfield/Cheshire, SK10

4TG, UK

SOURCE:

Drug Design and Discovery (1992), 9(2), 167-76, (plate) CODEN: DDDIEV; ISSN: 1055-9612

DOCUMENT TYPE:

Journal

LANGUAGE:

English

GI

HO — OCH2CHCH2NHCH2CH2O — OH
$$\frac{OH}{V}$$
 OCH2CHCH2NHCH2CH2O — NH2 $\frac{OH}{V}$ N $\frac{OH}{H}$ $\frac{OH}{V}$ N \frac{OH}

- The high potency at $\beta1$ receptors, excellent selectivity $(\beta1/\beta2)$ and high degree of agonism displayed by compds. such as I is believed to be due in part to the salicylamide side chain. Two conformations of salicylamide are known to exist in the crystal state, but ab initio calcns. suggest that in the absence of crystal packing forces one of them containing the amide group should be more stable. The aminoquinazoline group was judged to be a good replacement for salicylamide in I, and consequently the oxypropanolamine derivative (II) was prepared II shows extremely high potency at the $\beta1$ receptor, and excellent $\beta1/\beta2$ selectivity. It has comparable in vitro activity to I, although it displays a lower degree of agonism. In this system, aminoquinazoline appears to be an excellent mimic of the salicylamide group.
- RN 154664-43-4 CAPLUS
 CN 4-Quinazolinamine, 6-[2-[bis(phenylmethyl)amino]ethoxy]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \operatorname{Ph-CH_2} & & & \\ \operatorname{Ph-CH_2-N-CH_2-CH_2-O} & & & & \\ \end{array}$$

- IT 154664-42-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 - (preparation and reaction with epoxide derivative)
- RN 154664-42-3 CAPLUS
 CN 4-Quinazolinamine, 6-[2-[(phenylmethyl)amino]ethoxy]- (9CI) (CA INDEX NAME)

- IT 154664-41-2P
 - RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and β 1-adrenergic agonists activity of, structure in relation to)
- RN 154664-41-2 CAPLUS
- CN Phenol, 4-[3-[[2-[(4-amino-6-quinazolinyl)oxy]ethyl]amino]-2-hydroxypropoxy]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 17 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1991:679943 CAPLUS

DOCUMENT NUMBER:

115:279943

TITLE:

Further studies on the synthesis of quinazolines from

2-fluorobenzonitriles

AUTHOR (S):

Hynes, John B.; Tomazic, Alenka; Parrish, Christie A.;

Fetzer, Oliver S.

CORPORATE SOURCE:

Dep. Pharm. Sci., Med. Univ. South Carolina,

Charleston, SC, 29425, USA

SOURCE:

Journal of Heterocyclic Chemistry (1991), 28(5),

1357-63

CODEN: JHTCAD; ISSN: 0022-152X

DOCUMENT TYPE:

Journal English

LANGUAGE:

GI

Fluorobenzonitriles I [R = H, R1 = Cl, Br, iodo, Me; R = cyano, R1 = H; R AΒ = C1, F, CF3, R1 = H; R = OR2, R1 = H, R2 = CH2CF3, CH2CF2CF3, CH2(CF2)2CF3] cyclize with H2NC(:NH)NH2 (II), MeC(:NH)NH2, or HN:CHNH2 to give quinazolines III (R3 = NH2, Me, H). Thus, II cyclized with I (R = H, R1 = C1, Br, iodo, Me) to give III (R3 = NH2).

137553-52-7P 137553-53-8P IT

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

137553-52-7 CAPLUS RN

4-Quinazolinamine, 2-methyl-5-(2,2,3,3,3-pentafluoropropoxy)- (9CI) CNINDEX NAME)

RN 137553-53-8 CAPLUS

4-Quinazolinamine, 5-(2,2,3,3,4,4,4-heptafluorobutoxy)-2-methyl- (9CI) CN

(CA INDEX NAME)

L5 ANSWER 18 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1990:55769 CAPLUS

DOCUMENT NUMBER:

112:55769

TITLE:

Antifolate and antibacterial activities of

5-substituted 2,4-diaminoquinazolines

AUTHOR(S):

Harris, Neil V.; Smith, Christopher; Bowden, Keith

Dagenham Res. Cent., Rhone-Poulenc Ltd.,

Dagenham/Essex, RM10 7XS, UK

CORPORATE SOURCE:

Journal of Medicinal Chemistry (1990), 33(1), 434-44

CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE:

Journal

LANGUAGE:

SOURCE:

English

OTHER SOURCE(S):

CASREACT 112:55769

GT

A series of 5-substituted 2,4-diaminoquinazolines I (R = alkoxy, AB alkylthio, dialkylamino) has been synthesized starting from 2,6-dinitrobenzonitrile by substitution, reduction, followed by cyclization with chloroformamidine hydrochloride, and evaluated as inhibitors of the enzyme dihydrofolate reductase (DHFR) from both bacterial and mammalian sources. The best compds., e.g. I (R = OMe), show good activity against E. coli DHFR, but there is no significant selectivity for the bacterial over the mammalian enzyme. The structure-activity relationships for enzyme inhibition appear to be complex and not amenable to simple anal.; a hypothesis to explain the observed qual. structure-activity relationships is proposed. The inhibitory activities of the compds. against the growth of intact bacterial cells in vitro closely parallel those for the inhibition of the isolated bacterial enzymes, suggesting that their antifolate action is responsible for their antibacterial effects. Five of the compds. were tested for their ability to cure a systemic E. coli infection in the mouse, but they showed no therapeutic effects at their maximum tolerated doses.

IT 123241-59-8P 123241-60-1P 123241-61-2P 123241-62-3P 123241-92-9P 123241-93-0P

123241-94-1P 123241-95-2P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation, antibacterial, and dihydrofolate reductase inhibition activity of)

RN 123241-59-8 CAPLUS

CN 2,4-Quinazolinediamine, 5-propoxy-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 123241-60-1 CAPLUS

CN 2,4-Quinazolinediamine, 5-butoxy-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & \text{N} & \text{NH}_2 \\ \hline & & \text{N} & \\ \text{n-BuO} & & \text{NH}_2 \end{array}$$

● HCl

RN 123241-61-2 CAPLUS

CN 2,4-Quinazolinediamine, 5-(hexyloxy)-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & N & NH_2 \\ \hline & N \\ Me- (CH_2)_5-O & NH_2 \end{array}$$

HCl

RN 123241-62-3 CAPLUS

CN 2,4-Quinazolinediamine, 5-(phenylmethoxy)-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & N & NH_2 \\ \hline & N & \\ Ph-CH_2-O & NH_2 & \end{array}$$

HCl

RN 123241-92-9 CAPLUS

CN 2,4-Quinazolinediamine, 5-propoxy- (9CI) (CA INDEX NAME)

RN 123241-93-0 CAPLUS

CN 2,4-Quinazolinediamine, 5-butoxy- (9CI) (CA INDEX NAME)

RN 123241-94-1 CAPLUS

CN 2,4-Quinazolinediamine, 5-(hexyloxy)- (9CI) (CA INDEX NAME)

$$N \longrightarrow NH_2$$
 $N \longrightarrow NH_2$
 $N \longrightarrow NH_2$
 $N \longrightarrow NH_2$

RN 123241-95-2 CAPLUS

CN 2,4-Quinazolinediamine, 5-(phenylmethoxy)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & N & NH_2 \\ \hline & N & \\ & N & \\ Ph-CH_2-O & NH_2 & \\ \end{array}$$

CORPORATE SOURCE:

L5 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1987:590264 CAPLUS

DOCUMENT NUMBER: 107:190264

TITLE: Metabolic fate of terazosin hydrochloride (1).

Metabolism in rats

AUTHOR(S): Shibata, Kunihiko; Igusa, Ritsuko; Inoue, Kaoru;

Mukouyama, Hiroko; Nakajima, Junko; Fujino, Akiharu;

Sekiya, Tetsuo; Uchide, Masayuki

NRI Life Sci., Kamakura, 247, Japan

Oyo Yakuri (1987), 33(5), 765-74

CODEN: OYYAA2; ISSN: 0369-8033

DOCUMENT TYPE: Journal

LANGUAGE: Japanese

GΙ

R10

 R^2O

SOURCE:

 $_{\parallel}^{NH_{2}}$ I, R=Q, R¹=R²=Me

II, $R=COCH(OH)CH_2CH_2CO_2H$, $R^1=R^2=Me$

III, R=Q, $R^1=H$, $R^2=Me$

IV, R=Q, $R^1=Me$, $R^2=H$

V, R=H, $R^1=R^2=Me$

AB The metabolism of terazosin-HCl (I-HCl) was studied in rats after oral administration of 14C-labeled I-HCl (1 mg/kg). Unchanged I, II-V, and 2,4-diamino-6,7-dimethoxyquinazoline were identified in the bile and urine by comparing them with the authentic samples by TLC co-chromatog. Further identification of II was achieved by a comparison of mass spectrum of the isolated metabolite with that of the authentic compound The major radioactive component excreted in the urine was unchanged I (11.2% of dose). The main metabolites in the urine were II (1.1% of dose) and the conjugates of III. In the bile, unchanged I (0.4% of dose) was a minor radioactive component and the major metabolite was II (10.7% of dose). The main metabolic pathway of I-HCl in rats involved the formation of lactone by oxidation of the THF ring of I followed by the formation of II by hydrolysis of the lactone.

IT 111013-25-3P 111013-26-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and hydrogenolysis of)

RN 111013-25-3 CAPLUS

CN Piperazine, 1-[4-amino-6-(benzoyloxy)-7-methoxy-2-quinazolinyl]-4-

[(tetrahydro-2-furanyl)carbonyl] - (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{MeO} & \text{N} & \text{N} & \text{O} \\ \text{O} & \text{N} & \text{N} & \text{N} & \text{C} \\ \\ \text{Ph-C-O} & \text{NH}_2 & \text{O} & \text{O} \\ \end{array}$$

CN Piperazine, 1-[4-amino-7-(benzoyloxy)-6-methoxy-2-quinazolinyl]-4-[(tetrahydro-2-furanyl)carbonyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
O \\
Ph-C-O \\
MeO
\end{array}$$

$$\begin{array}{c|c}
N \\
N \\
N \\
N \\
C
\end{array}$$

IT 111013-23-1 111013-24-2

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with tetrahydrofurancarbonylpiperazine)

RN 111013-23-1 CAPLUS

CN 6-Quinazolinol, 4-amino-2-chloro-7-methoxy-, benzoate (ester) (9CI) (CA INDEX NAME)

RN 111013-24-2 CAPLUS

CN 7-Quinazolinol, 4-amino-2-chloro-6-methoxy-, benzoate (ester) (9CI) (CA INDEX NAME)

L5 ANSWER 20 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1985:571456

DOCUMENT NUMBER: 103:171456

TITLE: Comparative QSAR of antibacterial dihydrofolate

reductase inhibitors

AUTHOR(S): Coats, Eugene A.; Genther, Clara S.; Smith, Carl C.

CORPORATE SOURCE: Coll. Pharm., Univ. Cincinnati, Cincinnati, OH, USA SOURCE: QSAR Des. Bioact. Compd. (1984), 71-85. Editor(s):

CAPLUS

Kuchar, M. Prous: Barcelona, Spain.

CODEN: 53SIAU

DOCUMENT TYPE: Conference LANGUAGE: English

AB The quant. structure-activity relationship (QSAR) of pteridines, pyrimidines, triazines, and quinazolines with regard to inhibition of dihydrofolate reductase (DHFR) [9002-03-3] of Lactobacillus casei was studied. The results were interpreted in light of the known x-ray crystal

structure of the ternary complex of L. casei DHFR with methotrexate and NADPH and with reference to previously conducted QSAR studies on isolated L. The correlations obtained for pteridines, pyrimidines, and phenyltriazines provide a logical extension of the known methotrexate L. casei-DHFR interactions. In case of quinazolines, however, the results of QSAR do not match with the available conceptualization of inhibitor-active site interaction; the possible modes of quinazoline-DHFR interaction thus remain as conjecture or hypothesis until further exptl. data are available.

TT 98747-31-0

RL: BIOL (Biological study)

(dihydrofolate reductase inhibition by, QSAR of)

98747-31-0 CAPLUS RN

CN2,4-Quinazolinediamine, 6-(2-phenylethoxy)- (9CI) (CA INDEX NAME)

ANSWER 21 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1981:30786 CAPLUS

DOCUMENT NUMBER:

94:30786

TITLE:

4-Amino-2-piperidinoquinazoline derivatives and

pharmaceutical preparations containing them

INVENTOR(S):

Campbell, Simon Fraser; Danilewicz, John Christopher;

APPLICATION NO. DATE

FR 1980-2012

GB 1980-3133

19800130

19800130

Greengrass, Colin William

PATENT ASSIGNEE(S):

Pfizer Corp., UK

SOURCE:

Ger. Offen., 26 pp.

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

KIND DATE

A1

B1

Α

B2

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.

FR 2447919

FR 2447919

GB 2041373

GB 2041373

---------19800814 DE 1980-3003323 19800130 DE 3003323 Α1 DK 1979-5408 DK 7905408 Α 19800801 19791218 19800801 Α SE 1980-699 19800129 SE 8000699 FI 8000252 Α FI 1980-252 19800129 19800801 В FI 63936 19830531 C FI 63936 19830912 AU 8055024 **A**1 19800807 AU 1980-55024 19800129 AT 1980-469 19800129 AT 8000469 Α 19830615 В AT 373595 19840210 IL 1980-59252 19800129 IL 59252 Α1 19831130 CS 231970 B2 CS 1980-607 19800129 19850116 BE 881448 A1 19800730 BE 1980-199187 19800130 NO 8000230 NO 1980-230 19800130 Α 19800801 NL 8000571 Α NL 1980-571 19800130 19800804 JP 55104278 A2 JP 1980-9905 19800130 19800809 JP 57028711 B4 19820618

19800829

19830211

19800910

19821208

ZA 80005	57	Α	19810826	ZA	1980-557	19800130
SU 89529	1	A3	19811230	SU	1980-2877159	19800130
PL 12189	0	B1	19820630	\mathtt{PL}	1980-221683	19800130
CA 11316	36	A1	19820914	CA	1980-344714	19800130
HU 27418	}	0	19831028	HU	1980-202,	19800130
HU 18423	3	В	19840730			
ES 48812	9	A1	19801216	ES	1980-488129	19800131
DD 14872	0	С	19810610	DD	1980-218769	19800131
PRIORITY APPL	N. INFO.	:		GB 197	79-3398	19790131
GI						

$$\begin{array}{c|c} R^{10} & N & N \\ \hline & N & \\ RO & NH_2 & \end{array}$$

The title compds. [I; R = alkyl, PhCH2, cycloalkylmethyl; R1 = alkyl; R2 = H, alkyl, (substituted) Ph; R3 = H, Me; R4,R5 = H, Ph] were prepared for use as antihypertensives, e.g., at 1-50 mg/day orally. Thus, 2.6 g
4-amino-2-chloro-6,7-dimethoxyquinazoline was refluxed with 3.0 g
(ethoxyphenylethoxy)piperidine II in BuOH to give 2.0 g I.HCl (R = R1 = Me, R2 = Et, R3 = R4 = H, R5 = Ph).

1

IT 76041-58-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and debenzylation of)

RN 76041-58-2 CAPLUS

CN 4-Quinazolinamine, 2-[4-(2-ethoxy-1-phenylethoxy)-1-piperidinyl]-7-methoxy-6-(phenylmethoxy)-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Ph} \\ | \\ \text{O-CH-CH}_2\text{-OEt} \\ \\ \text{Ph-CH}_2\text{-O} \\ \\ \text{NH}_2 \end{array}$$

● HCl

IT 76041-56-0P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 76041-56-0 CAPLUS

CN 4-Quinazolinamine, 6-(cyclopropylmethoxy)-2-[4-(2-ethoxy-1-phenylethoxy)-1-piperidinyl]-7-methoxy-, (2R,3R)-2,3-dihydroxybutanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 76041-55-9 CMF C28 H36 N4 O4

CM 2

CRN 87-69-4 CMF C4 H6 O6

Absolute stereochemistry.

IT 60548-02-9

RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with piperidine derivative)

RN 60548-02-9 CAPLUS

CN 4-Quinazolinamine, 2-chloro-7-methoxy-6-(phenylmethoxy)- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{Ph-CH}_2 - \text{O} \\ \text{NH}_2 \end{array}$$

L5 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1977:25854 CAPLUS

DOCUMENT NUMBER:

86:25854

TITLE:

Quantitative structure-activity relation of

antimalarial and dihydrofolate reductase inhibition by

quinazolines and 5-substituted benzyl-2,4-

diaminopyrimidines

AUTHOR (S):

Hansch, Corwin; Fukunaga, James Y.; Jow, Priscilla Y.

C.; Hynes, John B.

CORPORATE SOURCE:

SOURCE:

Dep. Chem., Pomona Coll., Claremont, CA, USA

Journal of Medicinal Chemistry (1977), 20(1), 96-102

CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE:

LANGUAGE:

Ι

Journal English

 \mathbb{R}^2

$$H_2N$$
 N
 R^1
 R^2
 R^3
 R^3

A quant. structure-activity relationship (QSAR) for the inhibition of AΒ dihydrofolate reductase [9002-03-3] from Streptococcus faecium by 68 quinazolines (I: R1, R2 = NH2, SH, OH; R3 = arylsulfonyl, arylthio, aralkylamino) was formulated. This was compared with a QSAR for inhibition of Escherichia coli dihydrofolate reductase by 10 2,4-diamino-5-benzylpyrimidines (II: R1 = H, OMe; R2 = H, Me, Cl, OH, OMe; R3 = H, C1, OMe). The QSAR for inhibition of bacterial enzyme was compared with the QSAR for mammalian enzyme inhibition. A QSAR was also formulated for the antimalarial action of 64 quinazolines (I: R1 = R2 = NH2, BuNH, Me2N; R3 = aralkylamino, aralkyloxy, aryloxy, pyridyl, pyrrolyl, thienyl) and 6- and 8-aza analogs against Plasmodium berghei in The antimalarial QSAR is consistent with the in vitro bacterial mice. study.

IT 38711-07-8 38711-08-9

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antimalarial activity of, calcn. in relation to)

38711-07-8 CAPLUS RN

2,4-Quinazolinediamine, 6-[(4-chlorophenyl)methoxy]- (9CI) (CA INDEX CN NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ \text{C1} & & & \\ \end{array}$$

RN38711-08-9 CAPLUS

2,4-Quinazolinediamine, 6-(phenylmethoxy)- (9CI) (CA INDEX NAME) CN

$$Ph-CH_2-O \qquad \qquad NH_2 \\ NH_2$$

CAPLUS COPYRIGHT 2004 ACS on STN ANSWER 23 OF 25

ACCESSION NUMBER:

1977:25789 CAPLUS

DOCUMENT NUMBER:

86:25789

TITLE:

Synthesis and identification of the major metabolites

of prazosin formed in dog and rat

AUTHOR (S):

Althuis, T. H.; Hess, H. J.

CORPORATE SOURCE:

Med. Res. Lab., Pfizer, Inc., Groton, CT, USA

SOURCE:

Journal of Medicinal Chemistry (1976), 20(1), 146-9

CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE:

Journal

LANGUAGE:

English

GΙ

NH₂

I, R=Me, $R^1=H$

II, R=H, $R^1=Me$

III, $R=R^1=Me$

- The 6-O-demethyl (I-H2SO4) [60548-10-9] and 7-O-demethyl (II-H2SO4) AB [60548-11-0] analogs of prazosin-HCl (III-HCl) [19237-84-4] were prepared and I and II were found to be identical with major and significant metabolites of III in dogs and rats, but had less potent blood pressure lowering activity than III in dogs. I and II were prepared from isovanillin [621-59-0] and vanillin [121-33-5], resp., in 10-step reaction sequences. Two minor metabolites of III, 2-(1-piperazinyl)-4-amino-6,7dimethoxyquinazoline-2HCl [60548-08-5] and 2,4-diamino-6,7dimethoxyquinazoline [60547-96-8] were prepared and determined to have low hypotensive activity.
- IT 60548-03-0P 60564-38-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and debenzylation of)

RN

60548-03-0 CAPLUS
Piperazine, 1-[4-amino-7-methoxy-6-(phenylmethoxy)-2-quinazolinyl]-4-(2-CN furanylcarbonyl)-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 60564-38-7 CAPLUS

CN Piperazine, 1-[4-amino-6-methoxy-7-(phenylmethoxy)-2-quinazolinyl]-4-(2-furanylcarbonyl)-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

IT 52759-42-9P 60548-02-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction with piperazine derivative)

RN 52759-42-9 CAPLUS

CN 4-Quinazolinamine, 2-chloro-6-methoxy-7-(phenylmethoxy)- (9CI) (CA INDEX NAME)

RN 60548-02-9 CAPLUS

CN 4-Quinazolinamine, 2-chloro-7-methoxy-6-(phenylmethoxy)- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} & \text{N} & \text{Cl} \\ \text{Ph-CH}_2 - \text{O} & \text{NH}_2 \end{array}$$

ANSWER 24 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1974:413549 CAPLUS

DOCUMENT NUMBER:

81:13549

TITLE:

2-(or 4)-Aminoquinazoline derivatives

INVENTOR(S):

Danilewicz, John C.; Kemp, John E. G.; Wright, James

Robert

PATENT ASSIGNEE(S):

Pfizer Corp.

SOURCE:

Ger. Offen., 31 pp.

CODEN: GWXXBX

DOCUMENT TYPE:

LANGUAGE:

Patent German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE		APPLICATION NO.	DATE
DE 2345064		19740411		DE 1973-2345064	19730906
DE 2345064	C3	19791025			
DE 2345064	B2	19790308			
ZA 7305660	Α	19740731		ZA 1973-5660	19730820
IN 139088	A	19760508		IN 1973-CA1920	19730821
AU 7359606	A1	19750227		AU 1973-59606	19730824
DK 131725	В	19750825		DK 1973-4782	19730830
CA 995673	A1	19760824		CA 1973-180089	19730831
JP 49085078	A2	19740815		JP 1973-98934	19730904
US 3960861	Α	19760601		US 1973-394491	19730905
BE 804558	A1	19740306		BE 1973-135402	19730906
GB 1383409	Α	19750212		GB 1972-41992	19730906
AT 7307745	Α	19751015		AT 1973-7745	19730906
AT 330785	В	19760726			
DE 2366106	B1	19790621		DE 1973-2366106	19730906
DE 2366106	C2	19800214			
NL 7312350	Α	19740312		NL 1973-12350	19730907
NL 161152	C	19800115			
NL 161152	В	19790815			
FR 2198751	A1	19740405		FR 1973-32315	19730907
ES 418612	A1	19760716		ES 1973-418612	19730908
SU 555850	D	19770425		SU 1975-2095549	19750108
IN 141109	A	19770122		IN 1975-CA1357	19750711
US 4044136	A	19770823		US 1976-663627	19760303
PRIORITY APPLN. INFO.:			GB	1972-41992	19720909
			US	1973-394491	19730905

For diagram(s), see printed CA Issue.

AB Antihypertensive tetrahydroisoquinolinyl (amino)quinazolines (40 compds.) including I (R = R3 = H, R1 = OMe, R2 = OMe, OCHMe2, OEt, OCH2-CH : CH2; R = R3 = H, R1 = OEt, R2 = OMe, OEt; R = R1 = H, R2 = R3 = OMe; R = Me, R1 = R2 = OMe, R3 = H) were prepared Thus, 12 g I (R = R3 = H, R1 = R2 = OMe) was obtained by treating 12 g 4-amino-2-chloro-6,7-dimethoxyquinazoline with 9.6 g 6,7-dimethoxy-1,2,3,4-tetrahydroisoguinoline.

IT52759-39-4P

> RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN52759-39-4 CAPLUS

CN 4-Quinazolinamine, 2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)-6methoxy-7-(phenylmethoxy)-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \mathsf{Ph-CH}_2-\mathsf{O} & \mathsf{N} & \mathsf{N} \\ \mathsf{MeO} & \mathsf{N} & \mathsf{N} \\ \mathsf{NH}_2 & \mathsf{N} & \mathsf{N} \end{array}$$

HCl

52759-42-9 IT

RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with tetrahydroisoquinolines)

52759-42-9 CAPLUS RN

4-Quinazolinamine, 2-chloro-6-methoxy-7-(phenylmethoxy)- (9CI) (CA INDEX CN

CAPLUS COPYRIGHT 2004 ACS on STN 1.5 ANSWER 25 OF 25

ACCESSION NUMBER:

DOCUMENT NUMBER:

77:147966

TITLE:

Antimalarial drugs. 27. Folate antagonists. 5.

Antimalarial and antibacterial effects of

2,4-diamino-6-(aryloxy and aralkoxy)quinazoline

antimetabolites

1972:547966 CAPLUS

AUTHOR (S):

Elslager, Edward F.; Clarke, Jane; Johnson, Judith;

Werbel, Leslie M.; Davoll, John

CORPORATE SOURCE:

Res. Dev. Div., Parke, Davis and Co., Ann Arbor, MI,

SOURCE:

Journal of Heterocyclic Chemistry (1972), 9(4), 759-73

CODEN: JHTCAD; ISSN: 0022-152X

DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S): CASREACT 77:147966

Out of 45 2,4-diamino-6-(aryloxy and aralkoxy) guinazolines, such as 2,4-diamino-6-(2,4,5-trichlorophenoxy)quinazoline (I) [36804-91-8],

2,4-diamino-6-[(1-bromo-2-naphthyl)oxy]quinazoline [36804-92-9], and

2,4-diamino-6-(phenethyloxy)quinazoline-HCl [36804-93-0], 11

compds. were active orally at 6.3-174 mg/kg/day for 6 days against

Plasmodium berghei in mice, while 7 compds. were active s.c. at 40-640 mg/kg after a single dose. Fifteen compds. had antibacterial activity in vitro against Streptococcus faecalis, normal and drug-resistant

Staphylococcus aureus, Escherichia coli, and Shigella sonnei with min. inhibitory concns. of <0.25-20 μ g/ml (gradient plate).

36804-93-0 38711-07-8 38711-08-9 IT

RL: PRP (Properties)

(as antimalarials and bactericides)

RN 36804-93-0 CAPLUS

CN 2,4-Quinazolinediamine, 6-(2-phenylethoxy)-, monohydrochloride (9CI) (CA INDEX NAME)

$$\mathsf{Ph}-\mathsf{CH}_2-\mathsf{CH}_2-\mathsf{O} \\ \\ \mathsf{NH}_2 \\$$

● HCl

RN 38711-07-8 CAPLUS
CN 2,4-Quinazolinediamine, 6-[(4-chlorophenyl)methoxy]- (9CI) (CA INDEX NAME)

$$CH_2-O$$
 N
 NH_2
 NH_2

RN 38711-08-9 CAPLUS

CN 2,4-Quinazolinediamine, 6-(phenylmethoxy) - (9CI) (CA INDEX NAME)

$$Ph-CH_2-O$$
 N
 NH_2
 NH_2

=> d his

 L_5

(FILE 'HOME' ENTERED AT 17:03:41 ON 24 MAR 2004)

FILE 'REGISTRY' ENTERED AT 17:03:50 ON 24 MAR 2004
L1 STRUCTURE UPLOADED
L2 STRUCTURE UPLOADED
L3 81 S L1 FUL
L4 0 S L2 FUL

FILE 'CAPLUS' ENTERED AT 17:04:51 ON 24 MAR 2004 25 S L3